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FIJI.

COUNCIL PAPER, No. 43.

F.A. 48/4/19. pt. 3.

ANNUAL
MEDICAL AND HEALTH REPORT
FOR THE YEAR
1937.



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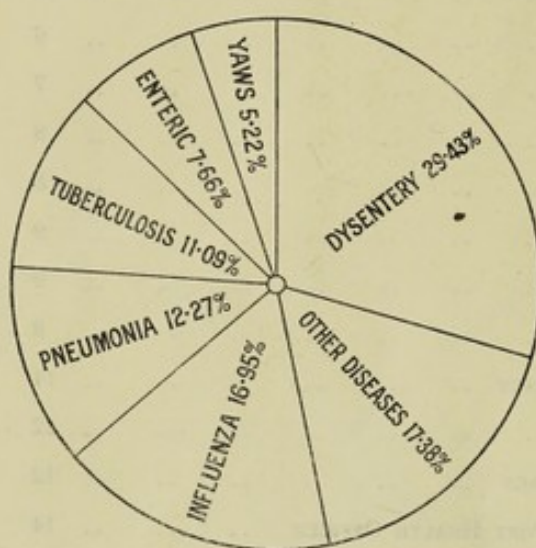
DIAGRAM SHOWING RELATIVE INCIDENCE OF DIFFERENT DISEASES.

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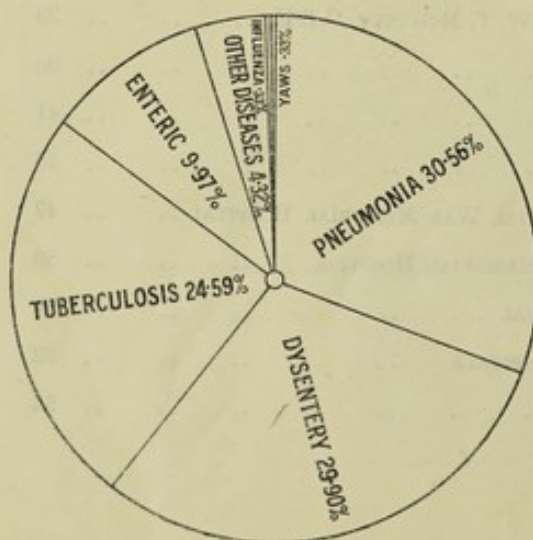
THE DIAGRAMS SHOW THE RELATIVE INCIDENCE OF DIFFERENT DISEASES CAUSING ADMISSION TO, AND DEATHS IN, HOSPITALS OF THE COLONY DURING 1937.

INFECTIVE DISEASES.

TOTAL INCIDENCE, 2,796

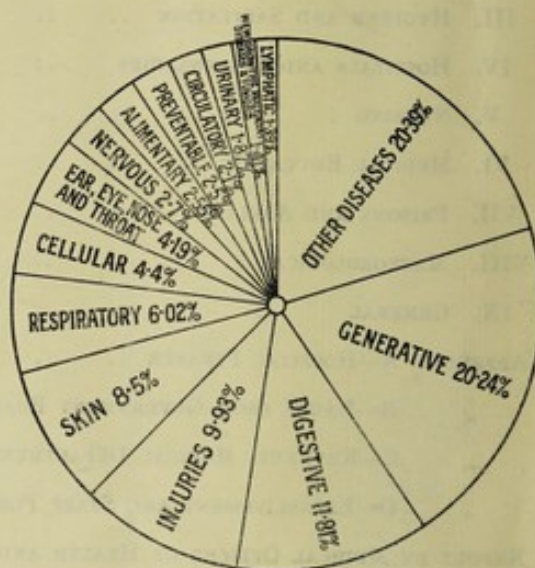


TOTAL DEATHS, 301.

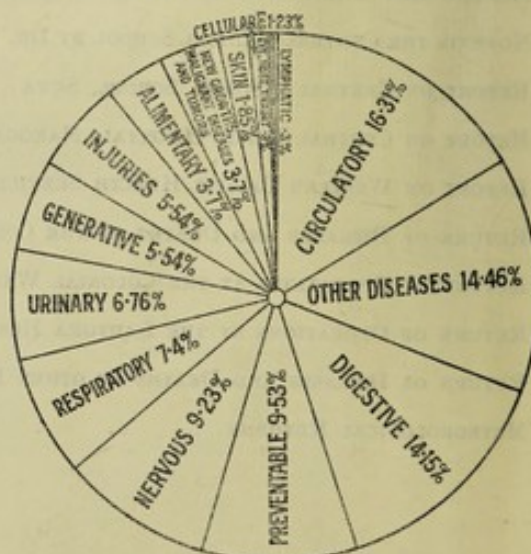


GENERAL SYSTEMIC AND PREVENTABLE DISEASES.

TOTAL CASES, 8,136.



TOTAL DEATHS, 325.



1938.

LEGISLATIVE COUNCIL,
FIJI.

COUNCIL PAPER, No. 43.

Medical Department

(ANNUAL MEDICAL REPORT FOR THE YEAR ENDING THE 31ST DECEMBER, 1937.)

THE ACTING DIRECTOR OF MEDICAL SERVICES TO THE HON. THE COLONIAL SECRETARY.

Medical Department,
Suva, 10th June, 1938.

Sir,

I have the honour to submit, for the information of His Excellency the Governor, and for transmission to the Right Honourable the Secretary of State, the Medical Report on the Health and Sanitary conditions prevailing in the Colony of Fiji for the year 1937, together with the returns appended thereto.

I have, &c.,

V. W. T. MCGUSTY,
Acting Director of Medical Services.

I.—ADMINISTRATION.

GENERAL DESCRIPTION OF THE ORGANISATION OF THE MEDICAL SERVICES.

In Fiji there is as yet no definite cleavage between the curative and preventive organisations, the activities in both fields being co-ordinated under the Director of Medical Services at the centre and in country districts under the district medical officers in their dual capacity of general medical officers and medical officers of health in their respective areas. There are no privately owned hospitals, and with the exception of 13 private medical practitioners, all the medical activities are centred in the Government. The present system, with respect to curative medicine, aims at centralisation as far as conditions permit on four main hospitals, one of which, the Colonial War Memorial Hospital in Suva, is intended to attain the highest standard of medical and surgical treatment, while the others, two of which are situated respectively at Lautoka and Labasa, continue to be maintained at a level of efficiency that is commensurate with the requirements of country hospitals. It is proposed to erect a fourth central hospital in the Ba district. While the central hospitals are used for specialised work, as well as for general purposes, it has not yet been deemed advisable to close the provincial or smaller type of native hospital, which is a survival from the days of primitive communications, but which can still serve a useful purpose, especially in times of epidemics. The curative services extend from the hospitals into dispensaries under the district medical officers and native and Indian medical practitioners, and in this manner they are brought into close contact with all sections of the community.

The health and curative activities of Government are closely associated with one another at vital points of contact such as hospitals and dispensaries, the teaching institutions of medical and nursing students, and the central laboratory.

A.—STAFF.

Appointments.—Miss C. E. Dawes, Sister, Colonial War Memorial Hospital, 23rd February; Miss M. G. Moore, Sister, Colonial War Memorial Hospital, 23rd February; Miss C. A. Dawes, Staff Nurse, Colonial War Memorial Hospital, 23rd February; Miss E. E. Davis, Staff Nurse, Colonial War Memorial Hospital, 23rd February; Rev. Sister Mary Carlina, Nursing Sister, Makogai Leper Hospital, 1st April; Rev. Sister Mary Nizier, Nursing Sister, Makogai Leper Hospital, 5th March; D. P. Gordon, Caretaker, Quarantine Island, Makaluva, 4th May; Miss E. E. Wilmot, Sister, Lautoka Hospital, 28th June; Dr. E. V. Maxwell, Temporary Medical Officer, 26th July; Miss M. Hardy, X-ray Nurse, Colonial War Memorial Hospital, 28th October; Miss I. M. McLeod, Probationer Nurse, Colonial War Memorial Hospital, 2nd November; Miss J. I. Reeve, Probationer Nurse, Colonial War Memorial Hospital, 30th November; Miss M. I. McKenzie, Probationer Nurse, Colonial War Memorial Hospital, 30th November; Miss J. M. d'Emden, Probationer Nurse, Colonial War Memorial Hospital, 30th November; Miss A. K. Dally, Probationer Nurse, Colonial War Memorial Hospital, 30th November.

Resignations.—Miss E. J. Garnett, Probationer Nurse, Colonial War Memorial Hospital, 5th February; Miss E. Deighton, Probationer Nurse, Colonial War Memorial Hospital, 14th February; Miss R. E. Phillips, Probationer Nurse, Colonial War Memorial Hospital, 20th February; Miss S. M. Cameron, Probationer Nurse, Colonial War Memorial Hospital, 1st April; Miss A. M. L. Lane, Probationer Nurse, Colonial War Memorial Hospital, 1st April; Rev. Sister Mary Fidelis, Nursing Sister, Makogai Leper Hospital, 1st April; Miss N. H. Retemeyer, Sister, Colonial War Memorial Hospital, 24th May; Miss E. M. Southey, Probationer Nurse, Colonial War Memorial Hospital, 1st July; Miss M. P. Ragg, Probationer Nurse, Colonial War Memorial Hospital, 12th September; Miss E. E. Hollands, Sister, Colonial War Memorial Hospital, 25th September; Miss J. H. Warren, Probationer Nurse, Colonial War Memorial Hospital, 1st October; Miss P. J. Seager, Probationer Nurse, Colonial War Memorial Hospital, 9th October. Most of the resignations from the nursing staff are consequent upon the scheme of seconding nurses from New Zealand, and upon the necessity for nurses who have undergone their training to resign from the staff when they obtain their diplomas.

Retirements.—Dr. W. M. Ramsay, District Medical Officer, 15th April; Dr. W. Foskett, District Medical Officer, 3rd May.

Death.—Dr. C. H. B. Thompson, Medical Officer of Health, 22nd June.

B—LEGISLATION AFFECTING PUBLIC HEALTH AND MEDICAL SERVICES ENACTED DURING THE YEAR.

The following Proclamation, Regulations, Declarations and Ordinances were passed during the year:—

Proclamation—

No. 5 of 1937 prohibiting the importation of live rabbits except for use in Government Laboratories.

Regulations—

Regulations made under the Public Health Ordinance No. 29 of 1935—Public Health Regulations 1937.

Regulations made under the Public Hospitals Ordinance No. 2 of 1884:—Amending the Colonial War Memorial Hospital Suva Regulations 1928.

Declarations—

Declaring New Zealand to be a place infected with acute anterior poliomyelitis.

Declaring Hong Kong to be a place infected with cholera.

Declaring acute anterior poliomyelitis to be a quarantinable disease.

Ordinances—

No. 30 of 1937—Pharmacy and Poisons Ordinance.

No. 31 of 1937—Dangerous Drugs Ordinance.

No. 35 of 1937—Sub-division of Lands Ordinance.

C—FINANCIAL.

The total expenditure under the two heads, Medical and Hospital, was:—

	1935.	1936.	1937.
Personal emoluments	£40,468 7 4	£41,028 0 2	£42,212 4 10
Other charges ..	37,583 17 10	40,057 11 11	42,210 11 2
Totals ..	£78,052 5 2	£81,085 12 1	£84,422 16 0

The revenue creditable to the Medical Department was:—1934, £9,383 19s. 3d.; 1935, £10,374 3s. 2d.; 1936, £13,699 19s. 11d.; 1937, £13,231 19 4.

The daily cost per patient at the Medical Institutions of the Colony in 1936 and 1937 was respectively:—

	1936.	1937.
	s. d.	s. d.
Colonial War Memorial Hospital ..	5 8-4	5 10-9
Lautoka Hospital	3 8-6	3 7-9
Levuka Hospital	5 0-3	6 1-2
Labasa Hospital	2 6-4	2 11-0
Public Lunatic Asylum	2 4-4	2 3-4
Central Leper Hospital	1 4-1	1 4-4
Provincial Hospitals	0 10-9	2 4-0
Nadi	2 0-3	2 9-9
Penang	1 9	2 3-1

Further details are given in Appendices A to C.

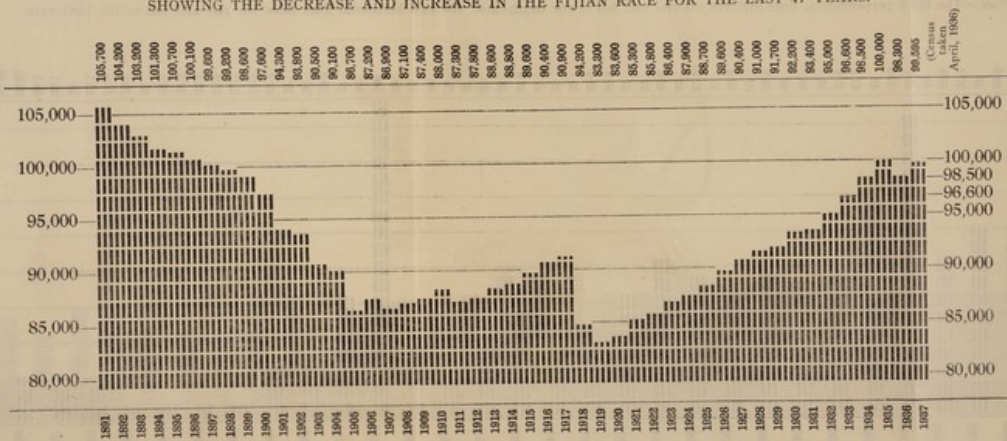
The Revenue of the Colony for 1937 amounted to £947,497 6s. 7d. Of this sum, £84,422 16s. 0d. was expended on Medical Services. The Revenue received amounted to £13,231 19s. 4d. The net cost, therefore, was £71,190 16s. 8d., or 7-5 per cent. of the total revenue. This is equivalent to an expenditure of 7-2 shillings per head of population.

II.—PUBLIC HEALTH.

A.—GENERAL PLAN OF ITS ADMINISTRATION.

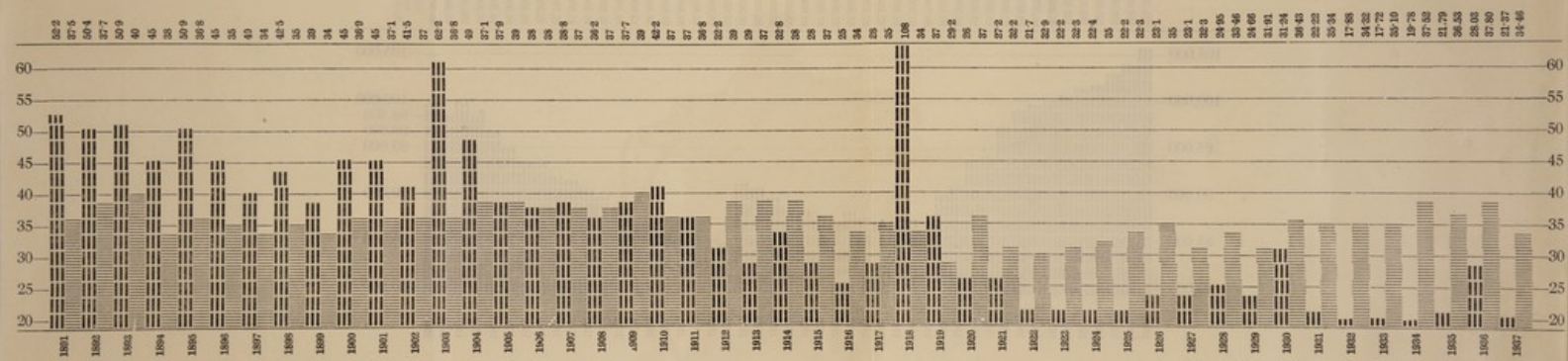
In the Fiji group the public health problem has been complicated by the fact that one-half of its population is made up of communally living natives, while the other is composed of individualist groups of immigrants with East Indians predominating. To meet this situation two distinct health organisations are maintained which have to be co-ordinated at all essential points. To take first the case of the native Fijian, the vast majority of whom continue to live in tribal units in small scattered villages averaging, perhaps, 150 inhabitants as they did in pre-Colonial days. Each village has its headman, and tribal affinities have brought about the grouping of

GRAPH A.
SHOWING THE DECREASE AND INCREASE IN THE FIJIAN RACE FOR THE LAST 47 YEARS.



GRAPH B.
SHOWING THE DEATH AND BIRTH RATE IN THE FIJIAN RACE FOR THE LAST 47 YEARS.

Note.—The thick perpendicular lines indicate the rise and fall in the death-rate; the thin horizontal lines show the rise and fall in the birth-rate.



villages into larger units, each of which is subject to the authority of a single chief. The present administrative areas are largely based on tribal affinities, and in regard to native administration, the principles of indirect rule are to some extent observed. The communal system is administered under a special code known as the Native Regulations in which public health laws are incorporated. Native Medical Practitioners are suitably posted in the native areas where they hold responsible positions with respect to both curative and preventive medicine, more or less within the communal organisation. Each official in the native administration is assigned a share of public health responsibility, while the communal nature of the whole native social organisation ensures co-ordination. To turn now to the non-native sections of the community, it is found that with respect to public health, they are subject in particular to three laws, namely, the Public Health, Quarantine, and Pure Foods Ordinances. The chief executive authority is the Central Board of Health, which has an official chairman and an official majority. Under its control there are Local Authorities in both urban and rural areas, the Central Board of Health officiating in all areas not otherwise provided for. The public health staff of the non-Fijian communities consists of one full time Medical Officer of Health, whose direct authority is limited to the port and environs of Suva, the medical officers posted in rural areas, who are *ex-officio* Medical Officers of Health, qualified sanitary inspectors, and a staff of sanitary overseers and sanitary assistants. The co-ordination of the Fijian and non-Fijian systems is effected in country areas by the Government medical officers, while all health and curative activities are under the central control of the Director of Medical Services.

B.—INFANT WELFARE AND SCHOOL HYGIENE.

Fijian Infant Welfare, the control of which passes from the Native Administration to the Medical Department on the 1st January, 1938, has already played an important part in the public health of the Fijians, chiefly through the delegation of health responsibilities to the native women, whose status has thereby been raised, and whose influence is steadily inculcating what may be called a health consciousness in the villages. The present system was introduced by Dr. Regina Roberts, wife of an American Consul who has since been transferred to another country. Under it one or more intelligent women are appointed by the chief in every village to carry out the daily routine work, which consists of the inspection and treatment for minor ailments of the children, and attention to domestic hygiene. Under normal staff conditions infant welfare is supervised on a Colony wide basis by an inspecting medical officer, while four specially trained European nurses are continuously engaged in field work. An important result of the assumption of control by the Medical Department will be that the special staff of infant welfare nurses will pass under the control of the nursing superintendent who will henceforth play an important part in the work. It is also intended that the interest and co-operation of the district administrative officers, which has played a major part in the past, shall not be lessened when the work is controlled by the Medical Department. Infant welfare work is continued on to the medical care of school children, and in this connection all schools throughout the Colony were inspected by District Medical Officers or native or Indian medical practitioners, those in the actual Suva urban and rural areas being the special charge of the Medical Officer of Health.

C.—VITAL STATISTICS.

The graphs A and B, introduced in the Annual Report, 1932, have been extended for 1937.

The estimated population at the end of 1936 and 1937 was:—

Race.	Males, 1937.	Females, 1937.	Total, 1937.	Total, 1936.	Increase.	Increase per cent.	Population 1936 Census.
Europeans	2,298	1,940	4,238	4,159	79	1.9	4,028
Half-castes	2,424	2,332	4,756	4,646	110	2.37	4,574
Fijians	50,697	48,898	99,595	98,291	1,304	1.33	97,651
Rotumans (all races)	1,456	1,459	2,915	2,844	71	2.49	2,816
East Indians	50,394	38,939	89,333	86,778	2,555	2.94	85,002
Polynesians	1,053	514	1,567	1,462	105	7.18	1,475
Chinese	1,537	300	1,837	1,792	45	2.50	1,751
Others	605	551	1,156	1,114	42	3.77	1,082
Total	110,464	94,933	205,397	201,086	4,311	2.14	198,379

The number of births recorded during the last four years was:—

Race.	1934.	1935.	1936.	1937.	Crude birth-rate per 1,000, 1937.
Europeans	42	62	64	71	16.75
Half-castes	90	162	160	150	31.54
Fijians	3,696	3,652	3,715	3,432	34.46
Rotumans	92	132	109	129	44.25
East Indians	3,098	3,210	3,484	3,357	37.58
Polynesians	39	54	26	74	47.22
Chinese	20	23	20	18	9.80
Others	119	35	56	53	45.85
Total	7,196	7,330	7,634	7,284	35.46

The general birth-rate in 1936 was 37.96.

The number of deaths recorded during the past four years was:—

Race.	1934.	1935.	1936.	1937.	Crude death-rate per 1,000, 1937.
Europeans	33	34	33	36	8.49
Half-castes	34	33	52	40	8.41
Fijians	1,948	2,178	2,755	2,128	21.37
Rotumans	115	69	67	58	19.90
East Indians	845	716	1,069	901	10.09
Polynesians	51	44	45	42	26.80
Chinese	4	10	15	6	3.27
Others	24	7	20	14	12.11
Total	3,054	3,091	4,056	3,225	15.70

The general death-rate for 1936 was 20.17.

The marriages, births, deaths and natural increase for 1937 were:—

Race.	Marriages.	Births.	Deaths.	Increase.	Decrease.
Europeans	46	71	36	35	..
Half-castes	44	150	40	110	..
Fijians	816	3,432	2,128	1,304	..
Rotumans	22	129	58	71	..
East Indians	875	3,357	901	2,456	..
Polynesians	17	74	42	32	..
Chinese	1	18	6	12	..
Others	23	53	14	39	..
Total	1,844	7,284	3,225	4,059	..

The rates of natural increase were:—Europeans, 8.4 per thousand; Half-castes, 23.7; Fijians, 13.27; Indians, 28.30; Chinese, 6.7. The natural increase of all races was 20.18 per thousand.

INFANTILE MORTALITY, 1937.

Race.	No. of deaths under 1 year.	Rate per 1,000 births.	No. of deaths 1-5 years.
Europeans	1	14.08	3
Half-castes	8	53.33	4
Fijians	331	96.44	371
East Indians	187	55.70	105
Polynesians	2	27.03	7
Others	4	75.47	3
Rotumans	10	77.52	8
Total	543	74.55	501

The number of Fijian births for 1937 was 3,432 which is a decrease of 283 on the number for 1936. The number of Indian births was 3,357 which also shows a decrease over the figure of the previous year amounting to 127. The birth rate per 1,000 of the whole population decreased from 37.96 in 1936 to 35.46 in 1937.

The foregoing tables and figures show that in the general increase of population that is taking place, the East Indians have far out-stripped the Fijians. Indeed the satisfactory state of the Indian community cannot be better illustrated than by the figures for 1937, which, in spite of the persistence of sex disproportion, show a crude birth rate as high as 37.58 per 1,000 and a crude death rate as low as 10.09 per 1,000. Although the Fijian birth rate reached the satisfactory figure of 34.46 per 1,000, a death rate of 21.37 takes too heavy a toll, especially where approximately 33½ percent of all deaths are in children under five years of age.

HEALTH STATISTICS OF EUROPEAN AND NON-EUROPEAN OFFICIALS 1937.

	Europeans.	Non-European.
Total number of officials resident	429	626
Average number resident	336	516
Total number on sick list	129	176
Total number of days on sick list	1,834	1,270
Average daily number of sick list	5.025	3.479
Percentage of sick to average number resident	38.395	34.108
Average number of days on sick list for each patient	14.217	7.216
Average sick time for each resident	5.458	2.461
Total number invalided out of the Colony	5	....
Percentage of invalidings to total residents	1.165	....
Total deaths	2	1
Percentage of deaths to total residents	.466	.16
Percentage of deaths to total average number of residents	.595	.193

D.—COMMUNICABLE DISEASES.

The Colony is fortunate in that its geographical position renders the entry of such diseases in vessels from neighbouring lands more susceptible of control. The occurrence of infectious illnesses strange to the Fijians was soon associated in native experience with the advent of strangers, and prior to the acceptance of Christianity the recognised method of imposing quarantine restrictions was by "Club Law."

Subsequent to the cession of the Colony to Great Britain, and as a result of the bitter lesson learned at the outset of the new era in 1875, when the occurrence of a tragic epidemic of measles caused a mortality of nearly 20 per cent. of the non-immune native population, stringent precautions to safeguard the inhabitants from the consequences of importation of infectious diseases have been enforced. That such measures have proved successful, is indicated by the fact that despite a large influx of labourers and other immigrants from India at various times, Plague, Smallpox, Cholera, Schistosomiasis, and other diseases prevalent in the Orient, have never yet entered the Colony.

The pandemic of Influenza which in 1918 included the Austral-Pacific Zone in its ravages, levied a heavy toll of life in Fiji, at a period when owing to the Great War the Colony's Medical Service was depleted in personnel and resources. Local epidemics of Influenza, continue to occur at intervals, but the cases have been of mild type.

Sporadic cases of clinical diphtheria make their appearance from time to time, and the presence of the Klebs-Löffler bacillus has been verified bacteriologically, but the degree of virulence has fortunately been very low. Scarlet fever has never been recorded, although severe streptococcal sore throat is relatively common.

The three most widespread communicable diseases which must be regarded as endemic, are Dysentery (bacillary and amoebic), Enteric fever, and Tuberculosis. During the year under review, 1,237 cases of Dysentery, 216 cases of Enteric fever and 342 cases of Tuberculosis, were notified to the Medical Officer of Health (see Tables). A Tuberculosis survey of the population is much needed, and has long been contemplated by the Medical Department, but the scattered distribution of the inhabitants among the eighty populated islands of the Group, together with shortage of staff have hitherto prevented its fruition.

Cases of Yaws continue to be found in the country districts, but natives have learned to appreciate the efficacy of treatment by the arsenicals and bismuth in this condition, and the frequently hideous scarring and deformity from tertiary yaws formerly seen is unknown among the younger generation. Contagious skin diseases, particularly Tokelau Ringworm (*Tinea imbricata*) and Scabies, are common in Fijian native communities, while *Epidermophyton interdigitale* is not infrequently found in Europeans and half-castes, and *Tinea cruris* in Indians. Measles, Mumps and Chicken-pox occasionally occur in epidemic form. In 1936, the two former were widespread in the Colony, but their incidence was low during the past year. The Fijians appear to have now acquired a much greater degree of immunity to measles than was formerly the case.

Under the terms of the Public Health Ordinance, 1935, Venereal disease is made notifiable, and its treatment compulsory, and Syphilis nowadays is rarely seen in the Colony except among crews of vessels calling at the Port of Suva, who attend for diagnosis and treatment under the terms of the Brussels Convention. Gonorrhoea appears to be the only member of the Venereal disease group found among the resident population. There is a remarkably small relapse rate among treated cases of Gonorrhoea in Fijians, and apparently an entire absence of late complications such as stricture. It is interesting to speculate whether constant indulgence in kava drinking has any effect in achieving these results.

It is a matter for thankfulness that the severe and prolonged epidemic of Infantile Paralysis which afflicted New Zealand and parts of Australia, during the year, did not affect this Colony.

III.—HYGIENE AND SANITATION.

SUVA URBAN DISTRICT.

Sanitation in the town of Suva until recently was controlled solely by the health department, first of the Municipal Council and then of its successor the Town Board. In order to bring about the better supervision of the town's sanitary services and at the same time co-ordinate them with the general services of the Colony, it was decided by the Town Board, and approved by Government, to place the town sanitary services and all of its health department officials under a Government official in the person of the Medical Officer of Health. Among measures adopted to improve the sanitary condition of the town of Suva during 1937 there may be mentioned a decision to have the sewerage system examined with a view to the introduction of a general scheme for its improvement; a decision to widen Renwick Road; street improvements including curbing and guttering; the introduction of legislation to control the subdivision of land within the town boundary and to control the sale of fish; a decision to undertake as soon as the preliminary arrangements are completed, a scheme to build new markets on modern lines in the place of the present ones which have outgrown their usefulness, and finally a decision to appoint a second qualified Sanitary Inspector. Another matter which has an important bearing on the health of Suva is the decision to extend the town's garbage services to suburban places for which the Town Board will receive subsidies from Government. The sanitation of the Suva Rural area is described in detail in the report of the Acting Medical Officer of Health on page 14.

IV.—HOSPITALS AND DISPENSARIES.

The Colonial War Memorial Hospital, a ferro-concrete two storeyed building, occupies a commanding position on a hill within the town boundary of Suva. It was opened in 1923 to replace the old Colonial Hospital. It has the fault of being inconveniently close to the present main traffic route into Suva, but this will soon be obviated by the construction of a by-pass road into which all long distance and heavy traffic will be deviated. It is the policy of Government to maintain the Colonial War Memorial Hospital, with respect particularly to its curative services, at a level of efficiency equal to that of larger hospitals in England and the Dominions, and for the present no other hospital in the Colony is expected to attain to the same standard. This hospital has at present approximately 180 beds and that number will soon be increased to over 200 in consequence of the scheme of development referred to in the 1936 Annual Report, the completion of which is expected to occupy four years. This scheme has advanced almost according to plan and the new nurses' quarters and the children's ward are expected to reach completion in August, 1938. The new laundry, which also includes sterilization and hot water plants for the hospital, will be well advanced, if it is not actually completed before the end of 1938, and by the same date it is expected that the new students' quarters and improvements in the X-ray Department will have been commenced. These important improvements comprise that part of the general scheme allotted to the years 1937 and 1938. In the two succeeding years it is intended to complete such of the works already mentioned as may still be under construction, and then to proceed in turn to the building of the classrooms and dormitories of the non-European nurses' school, and afterwards to the construction of a maternity ward, of a ward for the observation of mental cases, and probably too, of a new building to combine the functions of a health centre and out-patient department. It was decided that the health centre, when completed, should be dedicated to the memory of His Late Majesty King George V and therefore named the King George V Health Centre. In order that the clinical, public health, teaching and other activities of a health centre may not be unduly delayed, it has been decided, pending the erection of a more permanent building, to utilise the old medical students' quarters as a health centre and out-patient department as soon as the new students quarters are ready for occupation. When this proposal becomes effective the valuable space now occupied by the out-patient department within the Colonial War Memorial Hospital will be made available for an urgently needed increase in the accommodation for in-patients. The completion of this four year plan of development will place the hospital in all its departments on a level that will conform with modern standards, and closely connected with it there will be preventive and teaching branches of which the advantages should normally extend beyond Fiji to all the British dependencies in the Southern Pacific. The main features of the work done in the Colonial War Memorial Hospital during the year 1937 are set out in the report of the Medical Superintendent on page 27.

The Lautoka Hospital is constructed almost throughout its entirety of timber walls and iron roofs, and has 72 beds, a number which can be increased in emergencies. Well situated on rising ground within half a mile of the largest sugar mill in the Colony, it was opened in October, 1925. Previous hospital activities in the Lautoka area had been in the hands of the Colonial Sugar Refining Company, and Government's first intention was to establish this hospital solely for use by Indians, but while it was actually in course of construction it became evident that its advantages could not reasonably be withheld from other races, and its accommodation had to be extended to meet these requirements. Arrangements were ultimately made for the Colonial Sugar Refining Company to join forces with the Government, and the scheme of co-operation thus begun between the Government and the Company with regard to hospital activities has since been extended to other sugar areas. The first item in the enlargement of the Lautoka Hospital consisted of a ward for Fijians which was donated by the Colonial Sugar Refining Company, and this was followed in succession by a European ward, a training school for native nurses and an X-ray Department, of which the plant was presented by the Company. It is natural that a hospital that was planned for a single purpose and extended for others both during and after its construction, should rather consist of a number of scattered buildings than have all of its activities housed under one roof. It is true that this form of construction is open to objection, but at the same time it is not uncommonly found elsewhere in circumstances similar to those which exist in Lautoka, and it causes very little practical difficulty in maintaining the requisite standards of efficiency. It may be said of Lautoka Hospital, which at present provides for a population of between 50,000 and 60,000, that it is maintained at a very high level of efficiency, and that while in point of size it is steadily falling below the demand made on it by an increasing population, in point of the quality of its work it is commensurate with the requirements of the area which it serves. During the year there were 2,501 admissions to the Lautoka Hospital, the number of major operations reached the large figure of 470, and 7,129 patients were treated in the out-patient department.

The Labasa Hospital, which may be regarded as the central hospital for Vanua Levu and Taveuni, was established in 1931 as a result also of co-operation between Government and the Colonial Sugar Refining Company. It replaces the five separate hospitals which once existed in the district. It is well situated on rising ground in the vicinity of the most densely populated part of the Labasa area. It provides accommodation for 40 in-patients under a single roof. It is under the charge of the District Medical Officer, and has a resident staff of one Native Medical Practitioner, one Indian Medical Practitioner, one Sister in charge, one staff nurse and four native nurses. During the year there were 711 admissions to this hospital, and 9,155 patients were treated in its out-patient department.

In the Ba area there is one Government Hospital; two others that are owned by the Colonial Sugar Refining Company, and one that is maintained by the Methodist Mission. It is proposed to replace these small hospitals, except the one owned by the Methodist Mission, with a modern Government Hospital for which a site has been donated by the Colonial Sugar Refining

Company, who have also undertaken to contribute substantially towards its capital and recurrent costs. It is expected that the Ba Government Hospital will be ready for occupation before the end of 1940.

Levuka Hospital is small, but it is both convenient as to its design, and well equipped. It is central for the Lomaiviti and Lau districts, and has been maintained at its normal standard notwithstanding the lessened importance of Levuka in recent years that has resulted from the fall in the price of copra. This hospital is in charge of the District Medical Officer, and has a resident staff of one Native Medical Practitioner, one Sister in charge, and three native nurses. During the year there were 323 admissions and 3,467 patients were treated in its out-patient department.

Of the remaining hospitals, one is a relic of the old plantation hospital, one each was built in Nadi and Penang as part of a post war hospital extension plan, and the remainder are the native provincial hospitals, of which the period of maximum usefulness passed with the introduction of improved transport. A definite value still, however, attaches to the old provincial hospital, particularly in isolated places, on account of its convenience as a place for segregation and treatment purposes in times of epidemics. Dispensaries, apart from those attached to hospitals, have been established, as far as possible, at or near main centres of population, and at convenient places in most country areas.

The Native Medical Practitioners throughout the Colony treated 44,150 cases with 315 deaths. The following tables show the number of admissions and deaths at the hospitals of the Colony:—

COLONIAL WAR MEMORIAL HOSPITAL.

<i>Year.</i>	<i>Admissions.</i>	<i>Deaths.</i>	<i>Death-rate.</i>
1933	2,509	161	6.41
1934	2,398	144	6.00
1935	2,713	162	6.00
1936	3,074	228	7.42
1937	2,679	190	6.09

LAUTOKA HOSPITAL.

<i>Year.</i>	<i>Admissions.</i>	<i>Deaths.</i>	<i>Death-rate.</i>
1933	1,860	81	4.3
1934	1,862	88	4.73
1935	2,335	97	4.11
1936	2,055	116	5.64
1937	2,501	121	4.44

LEVUKA HOSPITAL.

<i>Year.</i>	<i>Admissions.</i>	<i>Deaths.</i>	<i>Death-rate.</i>
1933	249	11	4.6
1934	269	10	3.72
1935	287	10	3.48
1936	304	30	9.87
1937	323	14	4.33

LAMBASA HOSPITAL.

<i>Year.</i>	<i>Admissions.</i>	<i>Deaths.</i>	<i>Death-rate.</i>
1933	501	29	5.78
1934	522	29	5.55
1935	647	25	3.86
1936	763	36	4.72
1937	711	35	4.94

PROVINCIAL HOSPITALS

<i>Year.</i>	<i>Admissions.</i>	<i>Deaths.</i>	<i>Death-rate.</i>
1933	2,885	155	5.37
1934	2,398	135	5.63
1935	2,597	158	6.08
1936	3,573	240	6.72
1937	3,717	207	5.57

NATIVE MEDICAL PRACTITIONERS.

<i>Year.</i>	<i>Cases treated.</i>	<i>Deaths.</i>
1933	36,975	183
1934	37,416	261
1935	37,358	257
1936	42,171	293
1937	44,150	315

V.—NURSING.

The Colony continues to derive a great benefit from the scheme introduced in 1934, under which its nursing service is affiliated with that of the Health Department of the Government of New Zealand. For more than ten years the matron of the Colonial War Memorial Hospital has exercised nominal authority over the nursing staffs of other hospitals, which she has periodically

inspected. Considerable expansion has taken place during recent years in the nursing service both in its hospital and field branches, and to ensure co-ordinated direction the matron of the Suva Hospital was given definite authority throughout the Colony when her appointment of matron and nursing superintendent became effective on the 1st January, 1936. It is confidently anticipated that this central control of all nursing activities, which include Infant Welfare as from the 1st January, 1938, will lead to a marked all round increase of efficiency.

The following table shows the number and the classification of nurses now holding appointments in the Colony:—

Matron and Nursing Superintendent	1
Matron (Lautoka Hospital)	1
Assistant Matron	1
Sisters in Charge	2
Staff Sister	1
Sisters	11
Staff Nurses	3
Nurse Housekeeper	1
Probationer Nurses	9
Infant Welfare Nurses (European)	5
Senior Native Nurse	1
Native Obstetric Nurses	89
X-ray Sister	1
Makogai Leper Hospital—	
European Sisters	15
Native Nursing Sisters	10

VI.—MEDICAL EDUCATION.

The Central Medical School occupies a position of great prominence throughout Fiji and the other Pacific Island groups to which its activities extend. The details of work done during 1937 are set out in the Annual Report of the Principal, which is enclosed on page 33. There are enclosed on pages 30 and 41 two articles, the one entitled "The Medical Education of Natives," and the other entitled "The Central Medical School and its Relationship to Health Problems of the Pacific." These articles were prepared for submission to the Rural Hygiene Conference which was held in Java in August, 1937, and they are reprinted with this report by permission of the Director of the Health Services of the League of Nations.

The Nurses' Training School.—This school was conducted under the auspices of the Australian Trained Nurses' Association from its inception until 1934 when its control was handed over to the Dominion of New Zealand with the affiliation of Fiji's nursing service with that of the Dominion. The nursing school has been of value to the Colony both by providing trained nurses who are experienced in local conditions, and by giving occupation to young women who are domiciled here. Altered circumstances, among which may be mentioned the expansion of the nursing services which is rapidly taking place, have led to the decision gradually to replace this school by another in which non-Europeans will be trained as nurses up to a standard slightly below that of the fully qualified nurse, but adequate for the purposes of the subordinate nursing posts of the Colony. The senior staff of qualified nurses will, under this proposal, be recruited from New Zealand.

Native Obstetric Nurses.—The Native Obstetric Nurse is trained in the Colonial War Memorial Hospital, and it is largely due to the competence of the service to which she belongs that the Government decided to establish a school with improved facilities for training non-European women in general and obstetric nursing. The inauguration of the enlargement of the present school is expected to take place during the year 1939.

VII.—PRISONS AND ASYLUMS.

In addition to the central gaol at Suva there are prisons attached to the headquarters of all country stations which are used chiefly for short term prisoners. These country prisons have, as far as possible, been subjected to regular inspections by Medical Officers, and have been maintained in a satisfactory condition. It is generally observed that in spite of discipline and hard work the physical and mental condition of prisoners undergoes a rapid improvement as a result of a wholesome diet and regular hours, and that this improvement is maintained throughout the period of their detention.

The central gaol in Suva is well constructed as regards all its departments and is maintained in a cleanly condition which is a credit to the responsible officials and an asset in the preservation of the health of the inmates. During the year under review there were 66 admissions to the gaol infirmary while 300 prisoners were treated as out-patients for minor ailments. The only infectious diseases were three cases of influenza and four of dysentery. There were also three cases of gaol dropsy which responded to dietetic treatment. There is an Indian Medical Practitioner in permanent residence at the gaol which is also visited three times weekly by a visiting medical officer.

The Public Lunatic Asylum is the only mental hospital in the Colony. It occupies one of the finest sites in the neighbourhood of Suva and provides accommodation for its inmates in buildings which conform on the whole with modern standards. The Asylum grounds which are protected by high fences, are spacious enough to provide ample room for exercise and recreation for the patients. The institution is under the immediate charge of a head attendant and his assistant, both Europeans, and under them there is a staff of warders and wardresses, all natives of Samoa selected on account of the special aptitude of the people of those islands for the duties of attending on persons of unsound mind. The buildings and their surroundings were well maintained throughout the year in their usual sanitary condition and considering the characteristics

of the inmates it is largely to the credit of those responsible for their welfare that they remained so free from sickness, and that no cases of epidemic disease occurred among them during the year. The Public Lunatic Asylum is regularly visited by the visiting medical officer and periodically inspected by a Board of Visitors. The total number of patients treated during the year was 124, of whom 79 had remained over from 1936 and 45 were new admissions. Twenty-six patients were discharged unconditionally. There were 11 deaths and 87 patients remained at the end of the year.

VIII.—METEOROLOGICAL.

The total rainfall at Suva for 1937 was 106.63 inches, compared with the average of 119.46 over a period of 53 years. The wettest month was March, when 17.53 inches fell and the driest month was June, when 2.23 inches were recorded. There were 260 wet days, the wettest being March 19th, when 7.87 inches fell.

IX.—GENERAL.

DRUGS AND POISONS ORDINANCE (DANGEROUS DRUGS).

Permits to withdraw from the Dangerous Drugs Store were granted for the following amounts of Dangerous Drugs during 1937:—Chlorodyne 234 ounces; Liquor Opii Camph pro Tincture Conc (1-7) 200 pints; Syr. Codeine Phosphate 100 pints; Pulv. Ipecac. Co. (Dover's Powder) 30 lb; Tablet Pulv. Ipecac Comp. (Dover's Powder) 100 lb—444 bottles; Liquor Opium pro Tincture Conc. (1-9) 5 pints; Morphine Hydrochloride 1 ounce; Pulv. Opium 1 lb; Dental Anæsthetic-Cocaine Hydrochloride $\frac{3}{4}$ ounce (Cocaine).

An irreparable loss to Government and the Colony was occasioned by the sudden death on the 22nd June, of Dr. C. H. B. Thompson, Medical Officer of Health.

V. W. T. MCGUSTY,
Acting Director of Medical Services.

APPENDIX A.

COLONIAL WAR MEMORIAL HOSPITAL.

RETURN SHOWING THE EXPENDITURE AND REVENUE IN EACH OF THE LAST TEN YEARS AND THE COST PER BED OCCUPIED

Year.	In-patients.	Daily average in hospital.	Expenditure	Cost per head per day. Personal Emoluments	Cost per head per day. Other Charges.	Cost per head per day. Total.	Patients fees received.	Fees, if paid, of patients treated gratuitously
			£ s. d.	d.	d.	d.	£ s. d.	£ s. d.
1928	2,141	72.60	11,061 19 0	45.6	54.5	100.1	1,461 11 2	3,580 3 6
1929	2,464	80.3	11,029 0 0	42.3	48.0	90.3	1,534 11 5	3,097 15 0
1930	2,805	87.51	10,976 18 2	39.2	43.4	82.6	1,377 0 9	4,551 4 0
1931	2,303	87.04	10,690 19 1	43.8	36.9	80.5	1,628 6 5	3,278 0 0
1932	2,345	95.2	11,085 5 5	40.5	35.2	75.7	2,098 3 7	6,662 5 0
1933	2,509	104.83	11,382 19 6	38.4	33.1	71.5	2,067 5 3	5,497 18 10
1934	2,398	106.45	11,762 7 0	37.7	34.9	72.6	1,999 17 7	5,428 18 2
1935	2,713	118.07	12,237 16 10	31.92	36.22	68.14	2,245 4 4	5,421 1 0
1936	3,074	124.83	12,970 8 8	30.76	37.66	68.42	2,038 8 8	6,109 11 0
1937	2,679	106.71	11,513 10 10	28.25	42.70	70.95	2,143 3 9	6,025 9 0

Remarks.—Salaries of the Medical Officers are included. The expenditure on the Central Medical School is not included. The cost of drugs used for out-patients is included. The expenditure under Works Department votes is not included.

LAUTOKA HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND THE COST PER BED OCCUPIED.

Year.	Average daily number in hospital.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments	Other Charges.	
		£ s. d.	d.	d.	d.
1933	48.0	3,245 8 8	14.2	30.2	44.4
1934	49.0	3,366 14 1	13.2	32.0	45.2
1935	49.83	3,419 17 0	15.95	29.18	45.13
1936	50.0	3,557 18 0	14.74	29.92	44.66
1937	60.4	4,036 15 4	14.55	29.39	43.94

Remarks.—Does not include salaries of Medical Officers or of expenditure under Public Works Department. Cost of all drugs used is included.

LEVUKA HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND THE COST PER BED OCCUPIED.

Year.	Average daily number in hospital.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments	Other Charges.	
		£ s. d.	d.	d.	d.
1933	13.0	1,012 6 5	16.3	34.9	51.2
1934	8.16	956 19 7	25.2	51.8	77.0
1935	11.11	982 2 6	19.62	38.61	58.23
1936	11.02	1,014 5 8	18.42	41.92	60.34
1937	9.9	1,102 14 9	22.2	51.0	73.2

Remarks.—Does not include salaries of Medical Officers or expenditure under Public Works Department. Cost of all drugs used is included.

LABASA HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND COST PER BED OCCUPIED.

Year.	Average daily number in hospital.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments.	Other Charges.	
		£ s. d.	d.	d.	d.
1933	22.5	1,408 8 8	11.8	29.3	41.1
1934	14.67	1,212 5 9	18.6	35.0	53.6
1935	20.05	1,485 8 7	13.91	34.81	48.72
1936	34.22	1,591 8 0	7.88	22.59	30.47
1937	29.6	1,576 10 10	9.1	25.9	35.0

Remarks.—Does not include salaries of Medical Officers or expenditure under Public Works Department.
Cost of all drugs used is included.

LUNATIC ASYLUM.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND COST PER PATIENT PER DIEM.

Year.	Average daily number in asylum.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments.	Other Charges.	
		£ s. d.	d.	d.	d.
1933	81.0	3,183 4 11	12.6	13.2	25.8
1934	79.0	3,261 10 7	12.8	14.4	27.2
1935	77.0	3,462 1 6	14.87	14.7	29.57
1936	83.7	3,628 9 0	13.78	14.65	28.43
1937	86.6	3,607 8 0	13.1	14.3	27.4

Remarks.—Expenditure under Public Works Department votes and Medical Officers salaries not included.

MAKOGAI CENTRAL LEPER HOSPITAL.

RETURN OF EXPENDITURE FOR EACH OF THE PAST FIVE YEARS AND THE COST PER PATIENT PER DIEM.

Year.	Average daily number in Hospital.	Expenditure.	Cost per head per day.		Total.
			Personal Emoluments.	Other Charges.	
		£ s. d.	d.	d.	d.
1933	450.16	12,846 15 8	7.0	11.8	18.8
1934	448.25	13,292 18 10	7.06	12.44	19.5
1935	510.29	13,359 13 10	5.89	11.32	17.21
1936	571.35	14,072 11 8	5.45	10.67	16.12
1937	572.98	14,290 15 5	5.23	11.17	16.4

Remarks.—Does not include expenditure under Public Works Department votes which was in 1936, £1,823 10s. 1d., on maintenance and £1,555 12s. 6d. on permanent improvements, and in 1937, £1,806 3s. 11d., on maintenance and £2,977 16s. 8d. on permanent improvements.

RETURN SHOWING DAILY COST PER BED OCCUPIED DURING 1936 AND 1937 OF THE HOSPITALS AND ASYLUMS OF THE COLONY.

Hospital.	1936.		1937.	
	Aver. daily No. in Hosp.	Cost per head per day.	Aver. daily No. in Hosp.	Cost per head per day.
		£ s. d.		£ s. d.
Colonial War Mem. Hospital	124.83	5 8.42	106.71	5 10.95
Lautoka Hospital	50.00	3 8.66	60.4	3 7.94
Central Leper Hospital ..	571.35	1 4.12	572.98	1 4.4
Levuka Hospital	11.02	5 0.34	9.9	6 1.2
Labasa Hospital	34.22	2 6.47	29.6	2 11.0
Public Lunatic Asylum ..	83.70	2 4.43	86.6	2 3.4
Penang Hospital	11.24	1 9	10.69	2 3.12
Nadi	11.90	2 0.3	12.34	2 9.55
Ba	15.02	1 1.58	14.76	1 4.32
Taveuni	20.40	1 8.49	24.2	1 2.87
Rewa	17.00	1 4.65	19.34	1 7.96
Kadavu	9.70	1 10.67	8.56	2 4.85
Nadroga	21.59	1 2.08	5.00	4 10.8
Ra	10.00	1 11.2	8.76	3 7.38
Bua	16.75	1 0.77	3.12	6 3.64
Savusavu	13.94	1 7.87	6.2	3 2.4
Lau (Lomaloma)	14.10	1 11.97	12.00	1 8.5
Colo East	15.15	1 5.48	9.92	1 6.14
Rotuma	6.80	3 3.12	6.72	3 2.1

APPENDIX B.

VALUE OF ISSUES FROM THE GOVERNMENT PHARMACY DURING 1937.

1. Medical Department—

A—Hospitals and Dispensaries—					£	s.	d.	£	s.	d.
Bau	..	..	..	..	26	12	8			
Beqa	..	..	..	..	30	6	7			
Cikobia	..	..	..	..	46	11	5			
Colonial War Memorial Hospital ..					2,712	4	5			
Davuilevu	..	..	..	..	63	3	3			
Dreketi	..	..	..	..	44	13	2			
Gau	..	..	..	..	20	9	1			
Kadavu	..	..	..	..	79	15	11			
Koro	..	..	..	..	65	4	3			
Korolevu i wai	..	..	..	..	26	17	1			
Korovou, Tailevu	..	..	..	..	27	11	1			
Labasa	..	..	..	..	606	5	0			
Lakeba	..	..	..	..	84	14	0			
Lautoka	..	..	..	..	1,289	6	1			
Lekutu	..	..	..	..	40	6	1			
Levuka	..	..	..	..	321	9	1			
Lodoni	..	..	..	..	14	7	10			
Lomaloma	..	..	..	..	112	1	2			
Matuku	..	..	..	..	45	9	6			
Moala	..	..	..	..	26	18	9			
Momi	..	..	..	..	35	3	2			
Nabouwalu	..	..	..	..	86	11	1			
Nadarivatu	..	..	..	..	34	19	5			
Nadi	..	..	..	..	238	1	3			
Nadroga	..	..	..	..	173	9	8			
Naduri	..	..	..	..	37	12	8			
Naduruloulou	..	..	..	..	23	2	11			
Nailaga	..	..	..	..	146	15	10			
Nakasaleka	..	..	..	..	32	16	1			
Namarai	..	..	..	..	49	9	6			
Namata	..	..	..	..	17	15	10			
Namosi	..	..	..	..	22	14	2			
Nanukuloa	..	..	..	..	288	8	5			
Nasau	..	..	..	..	21	9	1			
Natewa	..	..	..	..	63	1	10			
Natuatuacoko	..	..	..	..	29	3	7			
Navatusila	..	..	..	..	17	19	1			
Navua	..	..	..	..	49	16	6			
Nayavu	..	..	..	..	63	1	7			
Penang	..	..	..	..	138	18	10			
Rewa	..	..	..	..	46	2	4			
Rotuma	..	..	..	..	105	10	0			
Savu Savu	..	..	..	..	153	15	0			
Serua	..	..	..	..	43	13	0			
Taveuni	..	..	..	..	478	1	7			
Tavua	..	..	..	..	78	16	3			
Veitogo	..	..	..	..	23	5	1			
Viria	..	..	..	..	33	14	6			
Visoqo	..	..	..	..	22	1	8			
Vunidawa	..	..	..	..	76	5	2			
Wainibokasi	..	..	..	..	249	5	1			
Wainunu	..	..	..	..	43	4	2			
Yasawa	..	..	..	..	21	14	6			
Total Hospitals and Dispensaries					....			8,630	15	3
B—Native Obstetric Nurses .. ..					....			35	16	6
C—Public Institutions—										
Public Lunatic Asylum					255	6	11			
Central Leper Station					984	13	3			
Total Public Institutions ..					....			1,240	0	2
D—Typhoid Immunization Campaign—										
Labasa					45	0	0			
Levuka					7	17	6			
North West Viti Levu					340	6	3			
Ra					6	15	0			
Rewa					101	5	0			
Suva					85	2	11			
Taveuni					27	0	0			
Total Typhoid Immunization ..					....			613	6	8

	£	s.	d.	£	s.	d.
E—Other Medical .. .. .	....			606	12	1
Total Medical .. .. .	....			11,126	10	8
2. Fijian Infant Welfare Scheme .. .. .	....			481	9	10
3. Other Government Departments—						
Schools	54	18	8			
Police	7	15	5			
Gaol Infirmary	65	0	3			
4. Other Government Departments	163	14	6			
Total Government Departments .. .. .	....			291	8	10
5. Native Lands Commissioner Surveyors .. .. .	....			0	17	3
6. Missions .. .. .	....			57	15	4
7. Private Accounts .. .. .	....			170	15	5
Total Issues from Government Pharmacy .. .. .	....			12,128	17	4

APPENDIX C.

REVENUE, MEDICAL DEPARTMENT.

Head IV—	1936.	1937.
1. (i) Dairy Licences, Suva and Levuka ..	£39 7 6	£40 5 0
4. Drug Permits	13 5 0	15 5 0
Head V—		
22. Hospital Fees, Colonial War Memorial Hospital, Levuka, Labasa & Lautoka Hospitals	3,565 11 5	3,802 7 9
24. Meat Inspection Fees	386 6 6	472 5 0
25. Central Leper Hospital Fees	6,067 8 2	5,180 18 8
26. Fees, Plantation Labourers, Lautoka and Labasa Hospitals	1,000 0 0	1,000 0 0
27. Central Medical School	1,706 16 6	1,813 9 2
Head IX—		
2—(a) Makaluva and Nukulau Fees ..	87 18 0	107 14 6
(b) Sale of Government Drugs ..	159 18 5	169 4 9
(c) Fumigation and Disinfection Fees	168 1 3	255 2 3
(d) Sale of Stock	8 15 0	21 5 0
3. Sale of Produce, Makogai	251 6 9	140 18 2
4. Bakery Receipts Makogai	231 13 11	201 13 2
9. Ten per cent. Profits Makogai Canteen ..	13 11 6	11 10 11
Total	£13,699 19 11	£13,231 19 4

APPENDIX D.

ESTABLISHMENT.

The Medical Staff of the Colony as sanctioned for the year 1937 was:—

Administrative.—Director of Medical Services, 1; First Class Clerk, 1; Third Class Clerks, 2; Fourth Class Clerks, 3; Pharmacist, 1; Messenger, 1; Packers, 2.

Medical.—District Medical Officers, 12; Native Medical Practitioners, 63; Indian Medical Practitioners, 7; Native Obstetric Nurses, 58.

Colonial War Memorial Hospital.—Medical Superintendent, 1; Assistant Medical Superintendent, 1; Native Dispenser, 1; Matron, 1; Assistant Matron, 1; Nursing Sisters, 5; European Probationers, 13; Nurse-Housekeeper, 1; Native Obstetric Nurses, 1; Native Nursing Pupils, 20; Steward and Clerk, 1; Servants, 24; Fourth Class Clerk, 1; X-ray Technician, 1; Hall Porter, 1; Seamstress, 1; Night Attendants, 2.

Levuka Hospital.—Nurse in Charge, 1; Native Dispenser, 1; Nurses (native), 2; Servants, 4.

Lunatic Asylum.—Head Attendant, 1; Assistant Attendant, 1; Female Resident Attendant, 1; Native Attendants, 9 male, 6 female; Servants, 2.

Central Leper Hospital.—Medical Superintendent, 1; Clerk, 1; European Nursing Sisters, 15; Native Sisters, 10; Overseer, 1; Native Constables, 3; Servants 19; Leper Patients employed as Servants, Headmen or School Teachers, 12; Bakers, 4.

Labasa Hospital.—Nurse in Charge, 1; Native Medical Practitioner, 1; Native Nurses, 2; Servants, 5.

Lautoka Hospital.—Native Medical Practitioner, 1; Matron, 1 Nursing Sisters, 3; Dresser, 1; Native Nurses, 7; Servants, 11.

Pathological Division.—Pathologist, 1; Technician, 1; Native Attendants, 3.

Sanitary—(1) General.—Medical Officer of Health, Suva, 1; European Sanitary Inspectors, 5; Fijian Sanitary Inspector, 1; Indian Sanitary Inspectors, 2; Police Officers who are also Sanitary Inspectors, 6; European Caretaker, Quarantine Station, 1; Indian Caretaker, Quarantine Station, 1
(2) *Ankylostomiasis Campaign*.—Indian Sanitary Inspectors, 5.

MEDICAL STAFF POSTINGS.

The Medical Staff postings on 31st December, 1937, were:—

- A. H. B. Pearce, L.R.C.P. & S. (Edin.), L.F.P.S. (Glasgow); D.P.H. (Dublin), F.R.San.I., Director of Medical Services.
- P. Harper, M.D. (Dunelm), M.R.C.S., L.R.C.P., District Medical Officer.
- A. J. Borg, M.D. (Malta), District Medical Officer, on leave.
- H. S. Evans, M.R.C.S., L.R.C.P., District Medical Officer, Rewa.
- T. Clunie, M.B., Ch.B. (Aberdeen), Medical Superintendent, Colonial War Memorial Hospital, on leave.
- M. L. McCauley, M.B., Ch.B., B.A.O. (Dublin), District Medical Officer, Labasa.
- R. J. Snodgrass, L.R.C.P. (Edin.), L.R.C.S., L.D.S., R.C.S.E., District Medical Officer, Ba.
- C. J. Austin, M.B., Ch.B. (Edin.), Medical Superintendent, Makogai Leper Asylum, on leave.
- W. G. MacNaughton, M.B., Ch.B. (Glasgow), Acting Medical Superintendent, Makogai Leper Asylum.
- G. T. Barnes, M.B., Ch.B. (Birmingham), D.T.M. & H. (Eng.), District Medical Officer, Ra.
- W. Worger, M.R.C.S. (London), L.R.C.P. (England), Acting Medical Superintendent, Colonial War Memorial Hospital.
- F. Widdlake, L.M.S.S.A. (London), District Medical Officer, Taveuni.
- D. C. M. Macpherson, M.B., Ch.B. (Glasgow), D.T.M. (Liverpool), C.P.H. (Johns Hopkins), Pathologist; also acting as Medical Officer of Health, Suva.
- D. W. Hoodless, B.Sc. (Lon.), L.M.S.S.A., Principal, Central Medical School.
- R. W. D. Maxwell, M.B., Ch.B. (N.Z.), District Medical Officer, Levuka.
- J. S. Cramer, M.B., Ch.B., F.R.F.P. & S. (Glasgow), L.R.C.P. & S. (Edin.) District Medical Officer, Nadroga.
- E. V. Maxwell, M.B., Ch.B. (N.Z.), Assistant Medical Superintendent, Colonial War Memorial Hospital.

Leave.—Dr. A. H. B. Pearce, 1st January to 29th January; Dr. P. T. Harper, 1st January to 31st March; Dr. H. S. Evans, 1st January to 14th January; Rev. Sister Mary Berchmans, 1st January to 31st January; Rev. Sister Mary Benigna, 1st January to 31st January; Miss J. Sinclair, 1st January to 27th May; Miss L. M. Lea, 15th January to 22nd April; Dr. T. Clunie, 4th February to 31st December; Dr. W. M. Ramsay, 12th February to 14th April; Rev. Sister Mary Alice, 5th March to 16th July; Rev. Sister Mary Philbert, 5th March to 16th July; Dr. A. J. Borg, 1st April to 31st December; J. Anning, 11th April to 31st December; A. Caldwell, 12th April to 23rd May; Miss N. H. Retemeyer, 25th February to 24th May; W. C. Cockell, 5th May to 2nd December; Miss M. M. Rial, 28th May to 31st December; Miss E. E. Hollands, 25th June to 24th September; Dr. C. J. Austin, 23rd July to 31st December; F. A. Taylor, 16th September to 31st December; Miss A. Storck, 5th July to 15th August; P. Burge, 11th October to 31st December.

REPORT BY DR. D. C. M. MACPHERSON, ACTING MEDICAL OFFICER OF HEALTH
AND PORT HEALTH OFFICER ON THE WORK OF THE SANITARY DIVISION
IN 1937.

I have the honour to submit the Annual Report together with relevant tables on the work of the Sanitary Division of the Department.

Staff.—It is with deep regret that I have to record the death on 22nd June as the result of an accident of Dr. C. H. B. Thompson who had occupied the post of Medical Officer of Health for Suva for eleven years. During his tenure of this responsible office, many important advances were made in the scope and extension of public health work throughout the Colony, and his wide experience and mature judgment were greatly valued by the Head of his Department and by Government.

Dr. D. C. M. Macpherson who had been acting as Medical Officer of Health during Dr. Thompson's absence from the Colony on leave, again assumed duty as from the 19th June and was appointed to be a temporary member of the Suva Town Board.

The Medical Officer of Health was gazetted as a member of the Subdivision of Lands Board on 30th November, 1937.

Mr. W. C. Cockell, Senior Sanitary Inspector, Central Board of Health, proceeded on nine months vacation leave as from 5th March, and resumed duty on 3rd December.

Mr. C. Kendrick, Chief Sanitary Inspector Central Board of Health took over Mr. Cockell's duties in addition to his own while the latter was absent from the Colony.

Mr. W. A. Milne, Meat and Food Inspector, was granted five days local leave as from 3rd September, and was transferred to Lautoka on 30th September.

Mr. Colin Charles Belcher was appointed to the Health Office as a temporary clerk in training from 15th September. His appointment was terminated on 15th December.

Mr. R. B. Fyfe, Sanitary Inspector was transferred from Lautoka to the Health Office on 30th September to carry out the duties of Meat and Food Inspector.

Mr. Matthew Samuels was transferred to Labasa on 23rd February for three months while Mr. Andrew Caldwell, Assistant Sanitary Inspector was on leave.

General.—The Medical Officer of Health is an official member of the Suva Town Board and Chairman of the Health Committee of that body. He also acts as Adviser to the Central Board of Health and is a member of the Town Planning and Subdivision of Lands Boards.

During the year arrangements were made whereby the Medical Officer of Health assumed control of the Town Boards Sanitary personnel, and this officer will in future direct all public health activities in both the urban and rural sanitary districts of Suva.

It was originally the intention of Government that the Medical Officer of Health should be provided with office accommodation in the part of the new Government buildings reserved for the offices of the Medical Department. Owing to the sale of the site of the old Pharmacy Building the whole question of housing the personnel of the Sanitary Division was reconsidered and it was deemed desirable to erect a separate building nearer the centre of the town and in closer proximity to the wharves. Plans have accordingly been prepared and approved, and construction of the new buildings will be commenced early in 1938.

The new building is situated on a portion of the wharf reclamation opposite the Government Bonded Store and new Pharmacy with frontages to Rodwell Road and Renown Street. Ferro-concrete is the material to be used, and the building will house the Health personnel of both the Government and Town Board. In addition to ample office accommodation, a new oil-fired steam pressure disinfecter with vacuum formalin attachment will be installed at the rear of the premises and also a specially ventilated fumigant store. A clinical room with appropriate fittings for inoculations, vaccination and examination of leper contacts, &c., has also been included in the plan.

The work of the Division has increased enormously during the past three years, largely as a result of the practical operation of the Public Health Ordinance of 1935. The great activity in building operations in Suva and vicinity has entailed much supervision and the detailed and regular inspection of dairy premises and products, to be thoroughly effective, necessitates the employment of a fulltime dairy inspector in the near future. Considerable reorganization of the Division has been proposed and should alternately be productive of more unified and continuous Public Health effort throughout the whole Colony.

Fijian Child Welfare.—During the year the Fijian Native Welfare Nurse who will in future be attached to this office paid visits as detailed below:—

Place.	No. of visits.
Nasese	25
Rewa Street	1
Flagstaff	17
Asylum Road	9
Laqere	12
Tamavua River	20
Kalekana	18
Suvavou	12
Bau Street	15
Viti-Solomoni (beyond Flagstaff)	1
Vunimoli	1

Place.	No. of visits.
Lami	4
Tacirua	3
Colo-i-Suva	2
Makila (near Muanikau Girls' School)	1
Vunidilo	7
Nasova	3
Caubati (4½ mile, Rewa Road)	1
Two miles	2
Total	154

INFECTIOUS DISEASES.

Dysentery was prevalent during the first quarter of the year, the highest incidences being in the Rewa, Nadroga, Suva and Lautoka districts. A steady and very satisfactory decrease throughout the following months was reported in all districts excepting Savu Savu, where an epidemic occurred in the middle of the year with 89 cases and 13 deaths.

Altogether 1,213 cases of bacillary and 24 cases of Amœbic dysentery with 67 deaths were reported to this office.

A considerable number of cases were notified in the early part of the year from the Flagstaff and Toorak areas in the Suva District. The water supply in the Flagstaff region is definitely unsatisfactory and has been the subject of a special report to Government.

Deaths from Dysentery with corresponding Number of Cases.

District.	Deaths.	Cases.	District.	Deaths.	Cases.
Suva	5	87	Nadroga	2	74
Ba and Tavua	2	49	Navua	2	19
Bua	2	16	Rewa	30	434
Kadavu	3	16	Savu Savu	13	103
Lautoka	3	68	Lomaiviti	2	23
Nadi	4	147			
				68	1,036

The percentage of deaths among total cases reported is 5.416. Total number of cases reported for the year 1,237.

Broncho Pneumonia.—Nadi, Lautoka, Ba and Tavua show the highest incidence of this disease—the total number of cases for the Colony was 223—an increase of 34 over last years figure.

Measles.—One hundred and sixty cases were reported from the country districts in the early part of the year but the disease appears to have subsided completely, no notifications being received during the final quarter of 1937.

Enteric Fever.—Total for Colony—216. An outbreak of 11 cases was reported from Nadarivatu, the earliest cases occurring in July and August.

Influenza has been prevalent throughout the Colony. One thousand seven hundred and eighty-four cases having been notified. The disease was mild in type and few cases developed serious complications or sequelæ. The total includes 1,142 Fijians and 572 Indians.

Cerebro Spinal Meningitis.—One Indian at Nadi.

Cerebral Meningitis.—One Fijian case reported from Lomaiviti.

Epidemic Dropsy.—Twelve cases of epidemic dropsy were reported from Ba at intervals throughout the year, and two from Suva. All cases were among Indians.

Poliomyelitis.—Acute poliomyelitis had been prevalent in New Zealand since December, 1936—840 cases with 42 deaths were reported by weekly cables up till the middle of July when the epidemic was officially considered over.

In view of the considerable passenger traffic between the Dominion and Fiji it was resolved that all persons disembarking from vessels in Suva should be placed under quarantine surveillance; and New Zealand was accordingly proclaimed an "infected place" under the terms of the Quarantine Ordinance No. 42 of 1928, and Acute Poliomyelitis a Quarantinable disease within the meaning of that Ordinance. No case of the disease occurred in the Colony during the year. Poliomyelitis has also been prevalent in Melbourne, Victoria, whence it appears to be gradually spreading north into New South Wales.

Food Poisoning.—During the first quarter four cases of food poisoning were investigated, three adult Fijians and one Fijian child aged 14 years, living in Toorak, being affected. It was discovered they had eaten Kai (shell fish) obtained from Rewa. The child died after being admitted to hospital in Suva.

Landry's Paralysis.—One adult Indian case was notified by Dr. Harper, Lautoka Hospital, whose detailed report was forwarded by the Medical Officer of Health to the Director of Medical Services. This was the first case of this disease to be reported to this office.

Undulant Fever.—During the 2nd quarter an Indian woman from the rural district of Suva was admitted to hospital suffering from this disease. By co-operation with the Pathological Laboratory and the Veterinary Section of the Agricultural Department, the source of infection was finally traced to a cow whose milk the patient had been in the habit of drinking.

Cholera.—Under the terms of the Quarantine Ordinance No. 42 of 1928, Hong Kong was on the 9th September proclaimed a place infected with Cholera. Special precautions were accordingly observed in regard to the granting of pratique to ships from Chinese and Japanese ports, and very satisfactory arrangements for the inoculation of the crews of such vessels with cholera vaccine prior to leaving the port of departure were made with shipping agents and the Port Health Authorities in Hong Kong.

Leprosy.—Examination of discharged lepers, 13; examination of contacts of lepers, 57; examination of suspected lepers, 3.

Infectious disease inquiries and examinations made by Medical Officer of Health and or Health Office staff in Suva District:—Visits re infectious diseases, 72; premises disinfected, 55.

Vaccination and Inoculation.—T.A.B. Inoculations, 922; small-pox, 10.

Port Health Work and Administration.—Number of oversea vessels boarded, 155.

Medical Inspections.—		1936.	1937.
Passengers	3,785	(landing, 3,421 through 364)	3,323 (landing, 3,063 through 260)
Crews	2,662		3,802
Labour	..		..
Total	6,447		7,125

Nett tonnage of vessels entering Colony at Port of Suva, 911,157. The number of vessels boarded show an increase of 8 over 1936.

Port of Suva.—Infectious diseases in or in the vicinity of ports in communication with Fiji:—

Disease.	Ports or countries.			Quarters of the year.		
Bronchial catarrh	Samoa	..	..	1,		
Cholera	Calcutta	..	..	1, 2, 3, 4		
	Hong Kong	..	..	3, 4		
Diphtheria	New South Wales	..	..	1, 2		
Dengue	Queensland and Thursday Is. ..	..	..	1, 2		
Influenza	San Francisco	..	..	1, 2, 3		
	Queensland	..	..	1, 2, 3		
	New Zealand	..	..	1, 2, 3		
Measles	Honolulu	..	..	1,		
Poliomyelitis	New Zealand	..	..	1, 2, 3, 4		
	New South Wales	..	..	3, 4		
Small-pox	Calcutta	..	..	1, 2, 3, 4		
	Hong Kong	..	..	1, 2, 3, 4		
	Los Angeles	..	..	2		
Weils disease	3 cases in Queensland in 2nd quarter & 8 cases in 3rd quarter.					

INSPECTION AND FUMIGATION OF SHIPPING AND ANTI-RAT MEASURES.

This includes vessels arriving from plague infected or suspected ports, vessels arriving from malarial ports likely to be harbouring adult anopheles mosquitoes—overseas vessels not holding deratisation or deratisation exemption certificates issued within the previous six months, vessels prior to going on the slip and local boats when undergoing six monthly surveys are fumigated by the Port Sanitary Staff.

The following table shows the number of vessels fumigated during 1937:—

Class of vessel.	Method of fumigation.			Rats destroyed by fumigation.		
	Cyanide units.	Cube cyanide & sulphuric acid.	Total.	Rattus rattus.	Rattus norvegicus.	Total.
Overseas	10	.. ..	10	5	2	7
Local vessels	19	50	69	47	3	50
Totals	29	50	79	52	5	57

Of the ten overseas vessels fumigated, rats were recovered from one only, this being the s.s. "Reaverly" from Japan via Shanghai and Hong Kong. The seven rats recovered were examined by the Government Pathologist and found to be healthy and negative to B. Pestis.

The compulsory fumigation of local vessels every six months has been the means of reducing the rat population of these boats to a minimum; not only does it rid vessels of rats, but it also destroys cockroaches and other vermin.

Of the 69 local vessels fumigated, rats were recovered from only seven.

During 1937 the use of sulphur dioxide gas as a fumigant for shipping has been entirely dispensed with, the fumigant used being cyanide units or cyanide cubes and sulphuric acid.

Cyanide units were used for all overseas vessels and for the larger local vessels.

"International" deratisation certificates issued numbered 10.

In addition to the fumigation of vessels an Indian ratcatcher is employed trapping rats at the wharves and in some areas of the town. The results of this work is shown in the following table:—

Type of trap set.	No. of traps set.	No. of rats caught.	No. of rats sent to laboratory for bacteriological examination.
Spring trap	9,087	1,942	....
Cage traps	779	166	....
Sticky trap	1,105	496	....
Totals ..	10,971	2,604	600

Of the 2,604 rats caught—2,154 were *Rattus norvegicus* (brown rat) and 450 *Rattus rattus* (black rat). Six hundred rats were sent to the Government Laboratory for Bacteriological examination and found negative for B. Pestis.

Visits have been paid to the wharves when overseas vessels were in port to ensure that satisfactory rat guards are placed on all moorings ropes.

Only in one or two instances was it found necessary to request the Masters of vessels to provide rat guards, and such requests were immediately complied with.

Disinfection of Imported Articles.—All articles, subject to disinfection, imported into the Colony have been disinfected unless the consignee produced a certificate of approved disinfection issued by a recognised Health Authority. The following table shows class of article, number and method of disinfection:—

Class of article.	Number disinfected.	Method of disinfection	
		Steam under pressure.	Formalin.
Re-conditioned felt hats ..	180	..	180
Second hand overcoats ..	61	61	..
Horse hair	1 bundle	1 bundle	..
	242	62	180

Port Food Inspection.—By arrangement with the Customs Department imported food stuffs are inspected at the Customs Shed by one of the Food Inspectors of the Health Department. This procedure has resulted in the following foodstuffs being condemned and destroyed as being unfit for human consumption:—

Articles of food.	Quantity condemned and destroyed.
Rice	47 bags
Mustard oil	555 galls.
Dhall	4 bags
Bovine kidney	1 case
Sausages (pork)	1 case
Rabbits (frozen)	1 case

Sanitation of Local Vessels.—Inspections have been made of these vessels when up for fumigation. In some cases the crews quarters are most insanitary through lack of reasonable ventilation, constant overcrowding and bad lighting. This is a matter which demands future attention.

GENERAL SANITATION WORK CARRIED OUT IN THE RURAL SANITARY DISTRICT OF SUVA AND INVESTIGATION OF INFECTIOUS DISEASES IN URBAN SUVA.

(a) Sanitary Inspections made in Rural Sanitary district of Suva:—Number of inspections, 3,926; re-inspection, 2,411; total visits, 6,337.

One thousand three hundred and eighty-nine more visits were made during the year than in 1936. The Native Medical Practitioner attached to the Department, is largely responsible for the increase. This officer's inspections were done amongst the Native and Solomon settlements in and around Suva.

(b) *Sanitary Improvements.*—The following is a summary of sanitary improvements completed during the year as a result of advice, verbal request or written notice by the inspectors:—

Summary of Sanitary Improvements.

New latrines constructed	57
Latrines repaired or cleaned	769
Insanitary latrines filled in	50
Septic tanks installed	15
Septic tanks repaired	1
New wells constructed	1
Wells protected, covered or repaired	32
Insanitary wells filled in	3
Water tanks repaired	..
Premises connected to pipe water supply	1
New bathrooms or washing places constructed	1
Bathrooms and washing places repaired cleansed or drained	15
Insanitary bathrooms demolished	..

New drains constructed	21
Drains repaired or cleansed	386
Accumulations of rubbish removed	429
Bush, &c., cut	457
Nuisance from keeping of animals abated	4
New kitchens erected	4
Kitchens repaired	5
Insanitary buildings demolished	23
Steps and stairways repaired	2
Floors repaired	1
Walls repaired	1
Roof repaired	2
Nuisance from mosquito breeding abated	11
Nuisance from dead animals abated	1
Gutters and R.W. pipes repaired and renewed	3
Fences removed	7
Nuisance from septic tanks abated	1
Nuisance from defective drainage	1
Written notices served	150

Prosecutions under Public Health Ordinance.—Only one person was prosecuted during the year under the above Ordinance—a European who had carried out extensive alterations to a building without having first obtained permission to do so from the Local Authority.

The prosecution of individuals in connection with breaches of Public Health Regulations is avoided wherever possible, as more permanent results can often be obtained by the exercise of tact and persuasion on the part of the inspector and thus obtain the co-operation of the offender.

Insanitary Buildings.—Twenty-one closing orders were served on owners of insanitary buildings, with a view to total demolition. Of 21 such buildings 19 have been demolished, and the owners of the remaining three were given an indefinite extension of time, as they were Indians of the poorest class and totally unable to bear the cost of erecting a new structure. Apart from the above, four buildings were voluntarily demolished by the owners following a verbal request from us.

There still remain many insanitary buildings in the Rural Sanitary District of Suva, but to carry out immediate wholesale demolition of these premises would create a serious shortage of house accommodation for the poorer classes.

The extensive building operations at present being carried out in Suva have no doubt caused an influx of workers from other localities with increased demand for house accommodation, and it appears to be necessary to proceed slowly with the demolition of dwelling and tenement houses until new buildings are available for occupation.

The question of a housing scheme for the working classes in and around Suva may have to be considered if the present shortage of accommodation continues.

New Buildings.—It is pleasing to be able to report that a decided improvement has taken place during the year in the standard of the new buildings erected. The inspectors have been successful in discouraging the use of wooden shutters, and the installation of glazed windows instead.

The coming into force of the new Public Health Regulations has been of great assistance to the Health staff in regard to effecting improvements in the standard of new buildings erected and especially in connection with sanitary plumbing and drainage.

The following is a summary of applications received in respect to new buildings and alterations to existing buildings:—

Total number of applications received	169
Total number of applications approved	138
Total number of applications disallowed	31

The following shows the classification of buildings approved:—

Tenement house	4
Dwelling-house	102
Combined dwelling and store	1
New kitchen	9
New bathroom	1
School	1
Wireless apparatus room	1
Motor garage	5
Store	3
Alteration to existing building	11

All sites were inspected before the application was approved.

Periodical visits were paid to all new buildings under construction, and instructions given to effect alterations when found necessary.

Eighty certificates were issued on completion of buildings complying with the requirements of the building regulations.

Septic Tanks.—The number of septic tanks installed in the Rural Sanitary district of Suva during the year was 15—this being an increase of 14 over 1936.

All applications to install a septic tank are submitted to the Central Board of Health for approval.

The standard of drainage plans in connection with the installation of septic tanks has greatly improved. The new Public Health Regulations has enabled us to confine the execution of this class of work to either a licensed plumber and drainer or an approved person.

ARTICLES OF CLOTHING DISINFECTED.

Class of article.	No. disinfected by steam under pressure.	No. disinfected by formalin.	Total.
Blankets (Fiji Defence Force) ..	582	..	582
Articles of clothing	..	150	150
Box in which clothes were packed..	..	1	1
Totals ..	582	151	733

The leper barge has been maintained. Leper contacts have been visited to arrange for six-monthly inspection by the Medical Officer of Health. Visits were made in connection with suspected lepers and arrangements made for their medical inspection.

Discharged lepers from Makogai on arrival at Suva were housed, fed and repatriated.

Sampling of Suva Water Supply and Suva Sea Baths.—The arrangement made in 1936 for the regular sampling of Suva water supply and the Suva sea baths was continued during the year.

The following shows the source of sample and number of samples taken for bacteriological examination:—

Source of sample.	No. of samples for bacteriological examination.
Shipping main	42
High level main	33
Low level main	34
Reservoir (Asylum Road)	9
Reservoir (main storage)	4
Reservoir (Toorak)	6
Intake head No. 7	1
Intake head No. 2	2
Pumping station	1
Rewa River	2
Total ..	134

Sixty-one samples were taken from Suva sea baths for bacteriological examination. All were reported satisfactory.

Surface Clearing and Sanitation.—This work has been continuous during the year with the exception of the last two weeks in December when the main gang had to be paid off as financial provision for the year was exhausted.

Vacant Crown lands have been cleared of long grass and bush, old drains cleared, new drains made, and accumulations of rubbish removed from the foreshore at Suva Point—the Grand Pacific Hotel to Nabukalau creek, and from the more thickly populated areas of Rural Suva. Two men have been continuously employed at the Suva Point Settlement, and one man at the King's Wharf, the latter worked seven days a week and his chief duty was to keep the public latrines at the wharf in a sanitary condition. He also cuts the grass on vacant Crown land in the vicinity of the wharf.

In April of this year a 1½ ton Ford lorry was purchased for the purpose of removing accumulations of rubbish.

The following is a summary of work done in connection with the clearing and draining of vacant Crown lands:—

Locality.	Approximate area of land cleared and burnt off.	Length of new drains made.	Length of existing drains weeded and cleaned.
	acres.	yards.	yards.
Government Domain	92		
Pender Street	1		
Samabula	10		
Domain Road East	6	1,356	4,196
Draiba	4		
Williamson Street	2½		
Nabukalou Creek	4		
	119½	1,365	4,196

Summary of Work done by Lorry.

Rubbish and tins removed.	Loads of sand and earth for filling in purposes.	No. of miscellaneous trips.	Total mileage.	Gallons of benzine used.
232	118	406	4,656	331

Miscellaneous trips include, transport of labour and native staff when no other vehicles were available, trips in connection with provision of grass and sawdust for animals at the Laboratory, cartage for Medical Department and Pharmacy.

Ankylostomiasis.—A hookworm survey of the schools in and around Suva was commenced on the 12th August; fecal specimens were collected from the children and forwarded to the Government Laboratory for microscopical examination. Treatments were also given to children showing infestation.

The following table shows by race the number of persons examined, positive to hookworm and the rate per cent. of infection:—

Race.	No. of persons examined.	No. positive to hookworm.	Rate per cent. of hookworm infestation.
Indians	131	59	% 45
Fijians	785	265	34
Other Races	55	6	11

Four hundred and eighteen persons were given treatment, the drug used being carbon tetrachloride with magnesium sulphate.

MEAT INSPECTION.

(a) Slaughtering has been carried out regularly at the following registered slaughter-houses. Tamavua (Leyland's and Corbett's), and Rewa Road 9 miles (Halal Meat Company).

All meat from animals slaughtered for human consumption at the above slaughter-houses has been examined before being exposed for sale.

The following is a summary of carcasses inspected:—

	Bullocks.	Cows.	Calves.	Sheep.	Pigs.	Totals.
Passed ..	1,518	527	225	1,098	958	4,326
Condemned ..	67	46	1	4	41	159
Totals ..	1,585	573	226	1,102	999	4,485

Inspection fees amounted to £371 9s. 0d., this being 3s. 6d. less than that received during 1936.

There has been a decided reduction in the number of sheep and pigs slaughtered during 1937.

(b) *Causes of condemnation (whole of carcase including organs):*—

Bullocks	Generalised tuberculosis	64
	Extensive bruising	2
	Exhaustion	1
Cows	Generalised tuberculosis	44
	Bruising	1
	Emaciation with tuberculosis	1
Calves	Tuberculosis	1
Sheep	Acute septic metritis	1
	Caseus lymphadenitis	1
	Fever	2
	Generalised pyæmia	2
Pigs	Generalised tuberculosis	36
	Fever	2
	Stephanurus dentatus	1

(c) *Causes of condemnation (organs, &c):*—

Ox—Forequarters	Tuberculosis	24
	Injury	1
Part of fore-quarters	Bruising	5
Flanks	Soiled during emergency slaughter	2
Foreleg and shoulder	Bruising	1
	Tumours	2
Neck meat	50 lb soiled during emergency slaughter	
Hindquarters	Tuberculosis	33
	Injury	1
	Multiple abscesses	1
	Peritonitis	2
	Internal hæmorrhage	1
Part of hindquarter	Bruising	1
Ribs	Soiled during emergency slaughter	4
	Internal hæmorrhage	6
	Tumours	8
Heads	Tuberculosis	173
	Mutilated by gunshot	8
	Actinomycosis	1

Livers	Angiomatosis	236
	Tuberculosis	133
	Bacterial necrosis	153
	Distomatosis	30
	Fever	40
Tails	Congestion	21
	Injury	1
	Cirrhosis	3
	Abscesses	3
	Fatty infiltration	5
	Hydatids	1
	Fatty inflammation	6
Kidneys	Nephritis	4
	Hydronephrosis	4
	Tuberculosis	3
Cows—Forequarters	Tuberculosis	4
Part of forequarter	Bruising	4
Hindquarters	Tuberculosis	3
Part of hindquarters	Bruising	2
	Injury	1
Udder flanks	Primary mastitis	1
	Tuberculosis	2
Kidneys	Hydronephrosis	2
	Inflammation	1
Tails	Bruising	1
Calves—Livers	Tuberculosis	2
	Bacterial Necrosis	8
	Fever	1
Heads	Tuberculosis	4
	Injury	1
Hindquarters	Injury	1
Tail	Injury	1
Sheep—Forequarters	Pyæmia	2
	Abscesses	4
	Pleurisy	2
Heads	Abscesses	1
Ribs	Pleurisy	1
Livers	Calcified cysts	195
	Distomatosis	218
	Fever	3
	Fatty degeneration	1
	Fatty infiltration	39
	Cirrhosis	1
	Cysticercus	31
Pigs—Forequarters	Pleurisy	4
	Bruising	2
Heads	Tuberculosis	67
Abscesses	Abscesses	1
Hindquarters and flanks	Tuberculosis and worm infection	2
Flank and lumber regions	Tuberculosis abscesses	2
Ham	Injury	1
	Abscesses	1
	Bruising	2
Livers	Tuberculosis	152
	Cirrhosis	113
	Fatty infiltration	17
	Congestion	6
	Fatty degeneration	5
	Abscesses	3
	Distomatosis	1
	Calcified cysts	4
	Hydatids	1
	Cysticercus	1
	Injury	1
Kidneys	Stephanurus dentatus	167
	Abscesses	2
	Tuberculosis	2
	Hydronephrosis	2
	Nephritis	10

Slaughter-house Premises.—There are two registered slaughter-houses in Suva Rural Sanitary district—one is situated on the Suva-Rewa Road near the nine mile peg, and is owned by an Indian—the other at Tamavua is owned by Messrs. Leyland's and Corbett's.

The Tamavua slaughter-house is an old building and does not conform to modern standards and should be replaced.

The question of erecting a public abattoir has already been considered by the Central Board of Health, who have appointed a committee to carry out investigations and make a report upon the whole situation.

Carriage of Foodstuffs.—All vehicles used for the carriage of meat and other foodstuffs are not granted registration until first approved by the Pure Food Inspector.

Inspection of Food Shops.—All Foodshops in the Sanitary District of Rural Suva have been inspected at intervals during the year.

Food Sampling.—The following tables show the numbers of food samples taken during the year, number adulterated, and action taken.

(a) *Pasteurised Milk (produce of Rewa Co-operative Butter factory):—*

Particulars of sample.	No. of samples taken.	No. of samples complying with Government standard.	No. of samples not up to Government standard.
Raw milk prior to pasteurisation	4	3	1
Pasteurised milk	41	26	15
Totals ..	45	29	16

all the above were random samples.

(b) *Other Articles Sampled:—*

Article.	No. of samples taken.	No. of samples adulterated.	Prosecutions.	Result of legal action.
Raw milk	102	61	13	10 cases fined; total amount in fines, £47 15s. 6d.; 3 cases to be heard in January, 1938.
Cream	1	....	....	
Mustard oil	5	4	....	

Of the 61 samples of raw milk found to be adulterated 36 were considered satisfactory as they were only slightly deficient in solids-not-fat, and showed a high fat content.

Inspection of Dairies and Dairy Herds.—There are 28 registered dairies in the Sanitary District of Rural Suva. These premises have been inspected at intervals and orders given to carry out improvements where necessary. All herds have been tuberculin tested by the Veterinary Department.

New Dairy Regulations.—Under the new Dairy Regulations all premises where milk or cream is produced, collected, stored or distributed for sale, require to be registered. This has increased the number of dairies under the control of the Central Board of Health from 28 to an estimated number of 64. To be added to these are ghee producers.

Some of these dairies are situated in the province of Colo East which is about 60 miles from Suva, others are located at Navua, a distance of over 30 miles. With the present staff it is almost impossible to inspect all these premises.

Revenue received through the Health Office.—It may be of interest to give the source and amount of revenue earned through the Health Office for the year. This is as follows:—

Dairy Licences	£32 2 6
Meat inspection fees	371 9 0
Fumigation fees	177 8 3
Fines	50 15 6
	£631 15 3

Rural Sanitary District of Navua.—The only work done in this district during the year has been in connection with approval of plans for new buildings. Later in the year arrangements were made for a European Inspector to visit Navua weekly for this purpose. The following applications were received and approved:—

Application to erect a store	1
Application to erect dwelling-house	7
Application to erect motor garage	1
Application to erect kitchen	1
Alteration to existing building	1

Arrangements have also been made to carry out a complete sanitary survey of this district commencing in January, 1938.

METEOROLOGICAL.

Month.	Inches.	Total average.
January	8.78	11.51
February	8.29	11.36
March	17.53	14.82
April	12.13	12.32
May	16.49	10.58
June	2.23	6.38
July	4.76	5.27
August	11.46	8.15
September	6.95	7.57
October	6.63	8.86
November	5.87	10.14
December	5.51	12.50

Total average over a period of 53 years.

LEGISLATION AFFECTING PUBLIC HEALTH.

Regulations.—

Public Health Regulations for the whole of the Colony were passed during the year.
Amendments to Public Health Regulations.

Proclamations.—

Declaring Acute Anterior Poliomyelitis to be a quarantinable disease.
Proclaiming that the Dominion of New Zealand is a place infected with Acute Anterior Poliomyelitis.
Declaring that Hong Kong is a place infected with cholera or from through which cholera may be brought or carried.

GAZETTE NOTICES.

Appointments.—

Dr. D. C. M. Macpherson to act as Medical Officer of Health.
The Commissioner of Lands to be an Official Member of the Central Board of Health.

Notices.—

Appointing Central Board of Health to be the Local Authority for the Rural Sanitary districts of Suva, Navua and Colo East.

TABLE I.—INFECTIOUS DISEASES—NOTIFICATIONS BY DISTRICTS.—1937.

Disease.	Suva Urban.	Suva Rural.	Ba and Tavea.	Bua.	Colo East.	Colo North.	Kadavu.	Lau.	Lautoka.	Lomaiviti.	Macuata.	Nadi.	Nadroga.	Navua.	Ra.	Rewa.	Rotuma.	Savu Savu.	Taveuni.	Totals.	Totals 1936.	1937 compared with 1936.
Ankylostomiasis	17	16	16	1	5	3	9	3	39	99	223	12	4	2	18	30	3	115	11	626	371	+255
Broncho-pneumonia	1	3	47	1	5	4	5	4	42	3	4	55	13	1	11	7	..	9	8	223	189	+34
Lobar-pneumonia	..	..	9	2	3	2	..	..	6	7	3	6	4	1	7	4	..	6	7	69	60	+9
Dengue fever	..	1	..	..	..	..	..	..	..	12	..	..	..	..	1	7	..	..	..	20	..	+20
Cerebral meningitis	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	4	..	+4
Cerebral spinal meningitis	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	+1
Chicken-pox	25	2	2	1	3	..	..	1	..	1	..	3	5	3	..	4	..	1	..	60	9	+51
Conjunctivitis	9	4	1	..	..	18	..	5	..	3	3	..	..	2	..	1	..	..	..	46	31	+15
Diphtheria	..	4	12	..	..	..	..	..	2	..	..	..	..	..	..	1	..	..	..	9	21	+12
Dropsy	2	..	..	..	..	..	..	..	72	23	72	150	75	19	..	..	10	103	19	14	1	+13
Dysentery	40	48	81	16	26	..	16	25	..	..	..	..	..	..	6	436	..	..	..	1,237*	1,745	+508
Erysipelas	1	7	74	..	..	11	2	1	12	1	19	16	14	..	13	18	..	11	2	216	188	+28
Enteric fever	..	..	..	..	8	..	..	..	..	21	5	5	2	3	..	26	..	6	2	86	..	+86
Infantile diarrhoea	..	9	48	12	75	26	18	372	76	102	27	367	29	25	66	131	118	119	67	1,784	1,358	+426
Influenza	97	..	..	..	3	..	..	3	15	..	6	4	12	1	8	3	8	1	..	1	..	+1
Landry's paralysis	..	..	..	4	..	..	..	12	6	..	1	2	15	..	1	..	..	..	7	76	45	+31
Leprosy	..	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	160	3,328	-3168
Measles	..	..	..	117	..	..	..	..	..	..	115	50	11	6	215	61	1	..	..	10	16	-6
Puerperal fever	..	..	1	..	..	..	..	4	..	35	115	50	..	..	..	..	1	..	13	680	145	+535
Ringworm	49	63	18	7	9	1	..	73	27	143	319	67	101	212	163	244	370	14	50	2,079	1,736	+343
Scabies	54	67	46	13	75	23	18	..	7	..	..	..	3	9	1	..	..	..	1	10	..	+10
Tetanus	3	..	1	..	..	2	5	..	15	1	15	33	14	9	..	15	..	..	8	143	138	+5
Trachoma	..	..	14	..	4	..	..	..	38	9	15	35	28	14	27	28	8	5	10	342	255	+87
Tuberculosis, pulmonary	13	13	48	10	10	15	4	6	6	2	3	9	5	3	6	2	1	1	1	1	25	+26
Tuberculosis, other	..	..	7	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	51	..	+51
Undulant fever	..	1	..	..	..	..	..	..	45	6	97	78	17	..	11	17	..	1	5	340	352	+12
Veneral disease	17	4	30	5	4	..	1	2	..	..	..	..	..	..	3	2	..	..	..	18	48	+30
Whooping cough	3	9	..	224	125	44	53	43	47	86	197	223	205	51	237	252	1,816	522	287	4,581	3,198	+1383
Yaws	10	1	158	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	348	254	622	430	359	150	133	556	457	565	1,135	1,121	558	352	794	1,291	2,335	930	498	12,888	13,259	..

* 1,213 Bacillary, 24 Amoebic.

TABLE II.—INFECTIOUS DISEASES NOTIFICATIONS (CASES) BY NATIONALITIES.—1937.

Disease.	Europeans	Half-castes.	Fijians.	Rotumans.	Indians.	Chinese.	Others.	Totals.
Ankylostomiasis ..	6	6	301	3	303	..	7	626
Broncho-pneumonia ..	..	6	111	..	105	..	1	223
Lobar-pneumonia ..	1	2	48	..	18	..	..	69
Dengue fever	..	..	19	..	1	..	..	20
Cerebral meningitis ..	..	..	1	..	3	..	..	4
Cerebral spinal meningitis	..	..	..	..	1	..	..	1
Chicken-pox	21	..	34	..	5	..	..	60
Conjunctivitis	..	1	32	..	12	..	1	46
Diphtheria	4	..	..	..	5	..	..	9
Dropsy	..	..	..	..	14	..	..	14
Dysentery	24	..	807	10	374	..	22	1,237
Erysipelas	1	..	..	..	..	..	..	1
Enteric fever	4	..	77	..	128	..	7	216
Infantile diarrhoea ..	..	..	78	..	8	..	..	86
Influenza	8	4	1,142	118	512	..	..	1,784
Landry's paralysis ..	..	..	..	..	1	..	..	1
Leprosy	..	..	36	8	29	..	3	76
Measles	..	..	156	..	3	1	..	160
Puerperal fever	1	..	..	1	8	..	..	10
Ringworm	..	2	512	1	153	2	10	680
Scabies	2	10	1,404	371	286	..	6	2,079
Tetanus	2	..	3	..	5	..	..	10
Trachoma	1	..	101	..	41	..	..	143
Tuberculosis, pulmonary	2	4	220	8	102	4	2	342
Undulant fever	..	..	..	..	1	..	..	1
Venereal disease ..	8	7	54	..	263	5	3	340
Whooping cough ..	..	1	3	..	14	..	..	18
Yaws	..	6	2,724	1,816	33	1	1	4,581
Tuberculosis, other ..	..	2	40	1	7	..	1	51
Totals ..	85	51	7,903	2,337	2,435	13	64	12,888

TABLES III.—INFECTIOUS DISEASES—MONTHLY INCIDENCE (CASES).—1937.

Disease.	Area.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Ankylostomiasis	A	6	..	..	..	..	..	..	3	5	2	2	..	18
	B	1	..	..	..	..	..	2	1	1	7	3	2	17
	C	74	9	29	61	41	114	34	61	42	60	49	17	591—626
Broncho-pneu- monia.	A	..	..	..	..	..	1	..	..	..	..	..	..	1
	B	..	..	..	..	..	..	1	1	1	..	..	..	3
	C	15	11	12	15	14	27	20	22	29	21	24	9	219—223
Lobar-pneumonia	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	6	5	8	2	5	12	2	9	4	4	7	5	69—69
Dengue fever ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	1	..	..	..	12	3	4	..	..	20—20
Cerebral menin- gitis.	A	..	..	..	..	..	..	..	..	..	..	..	..	1
	B	..	..	..	..	..	..	1	..	..	..	..	..	3—4
	C	..	..	..	1	..	..	1	1	..	..	..	..	..
Cerebral spinal meningitis.	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	1	..	..	..	..	..	..	..	..	..	..	..	1—1
Chicken-pox ..	A	..	..	..	17	1	..	..	2	1	1	..	..	22
	B	..	..	..	..	..	..	..	2	..	..	..	..	2
	C	2	..	2	3	1	10	9	3	1	2	3	..	36—60
Conjunctivitis ..	A	..	..	..	..	..	..	..	..	7	1	..	1	9
	B	..	..	..	1	..	..	..	1	..	1	..	..	4
	C	..	..	2	3	2	4	3	2	5	3	5	4	33—46
Diphtheria ..	A	..	1	..	..	..	..	..	..	..	..	..	..	1
	B	2	..	..	..	..	..	..	1	..	..	..	..	3
	C	1	..	..	..	..	..	1	2	..	..	1	..	5—9
Dropsy ..	A	2	..	..	..	..	..	..	..	..	..	..	..	2
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	..	..	8	3	1	..	..	..	..	12—14
Dysentery ..	A	11	11	8	6	1	..	5	2	1	..	..	..	45
	B	6	14	14	2	3	1	..	..	..	..	..	3	43
	C	279	341	162	131	106	27	23	22	18	8	11	21	1,149—1,237
Erysipelas ..	A	..	1	..	..	..	..	..	..	..	..	..	..	1
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever ..	A	1	2	1	1	..	..	1	2	1	..	1	1	11
	B	..	..	..	..	..	..	..	..	..	1	..	2	3
	C	23	15	24	18	31	13	18	20	6	11	6	17	202—216
Infantile diarrhoea	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	3	16	13	7	5	8	2	4	4	5	13	6	86—86
Influenza ..	A	..	..	..	1	21	10	20	9	36	..	..	..	97
	B	..	..	..	1	..	..	..	..	..	8	..	..	9
	C	71	72	83	106	119	186	148	236	184	176	220	77	1,678—1,784
Landry's paralysis	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	..	1	..	..	..	..	..	..	..	1—1
Leprosy ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	1	..	..	..	..	..	..	1	2
	C	3	16	7	4	5	13	1	5	2	5	5	8	74—76
Measles ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	97	49	11	2	1	..	..	..	..	..	..	..	160—160
Puerperal fever ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	1	..	1	..	2	1	..	1	1	3	..	..	10—10
Ringworm ..	A	..	..	..	..	12	9	11	5	12	..	16	17	49
	B	..	..	..	12	..	..	2	..	..	..	..	15	62
	C	29	33	53	76	27	38	33	74	30	106	58	12	569—680
Scabies ..	A	..	..	..	..	7	..	12	18	16	1	..	..	54
	B	..	..	..	18	..	..	..	..	..	12	15	22	67
	C	109	122	141	114	103	121	135	403	126	259	242	83	1,958—2,079
Tetanus ..	A	..	1	..	..	..	..	..	..	1	..	..	1	3
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	1	..	..	..	..	..	..	..	2	..	2	2	7—10
Trachoma ..	A	..	..	..	..	..	2	..	..	..	..	..	..	2
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	6	13	14	7	6	8	17	14	12	15	17	12	141—143
Tuberculosis, pul- monary.	A	..	..	1	2	2	..	1	..	1	2	1	2	12
	B	1	1	..	2	1	..	1	..	1	3	2	..	12
	C	18	20	25	23	20	23	28	26	30	36	35	34	318—342
Tuberculosis, other.	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	4	5	4	3	3	3	3	1	7	8	6	4	51—51
Undulant fever ..	A	..	..	..	..	..	..	..	..	..	..	..	..	..
	B	..	..	..	..	1	..	..	..	..	..	..	..	1
	C	..	..	..	..	..	..	..	..	..	..	..	..	..
Venereal disease	A	1	1	..	4	1	..	..	3	1	1	3	3	18
	B	..	..	..	..	..	..	..	..	..	1	1	..	2
	C	16	21	10	40	37	21	4	59	19	31	33	29	320—340
Whooping cough	A	..	..	..	..	1	..	..	..	..	1	2	5	9
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..	1	2	..	3	..	6—18
Yaws ..	A	..	..	..	..	4	2	..	2	2	..	..	..	10
	B	..	..	..	..	..	..	..	..	..	..	..	..	..
	C	344	528	637	201	236	413	228	528	207	634	413	202	4,571—4,581
Totals ..		1,134	1,308	1,262	886	821	1,074	771	1,559	821	1,449	1,203	600	12,888

REPORT BY DR. W. WORGER, ACTING MEDICAL SUPERINTENDENT, COLONIAL WAR MEMORIAL HOSPITAL.

Staff Changes.—Dr. Clunie, the Medical Superintendent, went on leave in February and I relieved him. Dr. Widlake the Assistant Medical Superintendent was transferred to Taveuni in February and Dr. Cramer took his place. Dr. Cramer was transferred to Sigatoka in June and Dr. E. V. Maxwell was appointed Assistant Medical Superintendent.

Nursing Staff.—Miss Lea, the Matron, went on leave in January and returned in April, Miss Hughes acting as matron during Miss Lea's absence. Miss Hughes was transferred to Lautoka as Sister-in-Charge on May 23rd. Sister Sinclair returned from leave on May 29th and was posted to the Colonial War Memorial Hospital as Assistant Matron. Sister Storck was transferred from Lautoka to Suva on March 6th. Sister Montgomery was transferred from Suva to Lautoka on March 5th. Sister Retemeyer resigned on February 25th. Sister Carew was transferred from Suva to Labasa as Sister-in-Charge on December 16th. Sisters Moore, Dawes and Staff Nurses Davis and Dawes joined the staff on February 27th. Sister Hardy was appointed X-ray Sister and commenced duty on November 6th. This is a new appointment. Nurses Ragg, Cameron, Phillips and Garnett completed their training. The nursing staff at present consists of:—Matron, Assistant Matron, 5 Sisters, 2 Staff Nurses, 9 Probationers, 1 House keeper, 1 Senior Native Nurse, 23 Native Nurses in training and 1 X-ray Sister.

Work in the Hospital.—During the year 2,679 patients were admitted for treatment:—

	1936.	1937.
Europeans	448	357
Fijians	935	845
Indians	1,227	1,113
Others	464	364
Total	3,074	2,679

The daily average for 1937 was 106.71. A detailed list of diseases is attached at the end of this report. Seven hundred and eighty-three operations were performed during the year. A list is attached. Five hundred and sixty-eight anaesthetics were given. These being given either by the Dispenser Native Medical Practitioner Vilikesa or the Assistant Medical Superintendent. European patient's anaesthetics were either given by Drs. Paley, Beattie or the Assistant Medical Superintendent. The work in the wards though interesting was moderate.

The following injections were given:—N.A.B., 790; T.A.B., 63; A.T.S., 269.

Obstetric Ward.—Two hundred and fifty-two cases were admitted. This ward was well patronised as usual. During 1938 a new ward is to be built, this will relieve the congestion that often occurs. A detailed list of cases admitted is as follows:—Admissions, 252; births, 219; Fijians, 94; Indians, 88; Others, 37. Among these were:—Triplets, 1 set; twins, 9 sets; still born, 13 (7 due to prematurity); caesarian sections, 4; instrumental delivery, 5; perforation, 1.

Out-patient attendances were as follows:—

Race.	1936.	1937.
Europeans	1,758	1,188
Fijians	7,057	7,065
Indians	6,995	8,054
Others	1,520	1,905
Total	17,330	18,212

On December the 4th the 1s. charge for drugs or dressings to Indians was abolished. This immediately led to an appreciable increase in the number of "chronic" patients. During the latter part of the year the visitor's days and hours were changed. Evening visiting being abolished. A card system was also introduced whereby a patient is only allowed two visitors at a time. This has made a marked difference at visiting times. Visitors are now controlled and the "sight-seeing element" (which was difficult to control and was a pest) is abolished. The wards are visited now only by genuine friends of patients and not sight-seers.

Epidemics.—There were no serious epidemics during the year in hospital.

X-ray Department.—This has done good work as usual. I enclose a report of the department.

Interesting Cases.—During the year there were a few unusual and very interesting cases which I think are worth recording.

Perforated Lung.—An old Indian of over sixty was brought to hospital with the history of having been thrown from his horse. On arrival (having been brought on a rude stretcher from some 40 miles beyond Nausori) he was found to be in a very collapsed state, suffering from a perforated wound of the chest and lung under the left clavicle. The wound was cleaned and he made a remarkable recovery.

Gored by a Bull.—An Indian farmer was gored by his bull. On admission and examination he was found to have a large and long wound just above his left Poupart's Ligament, this had lifted up the skin off the subcutaneous tissue right up to his lower left rib margin where he also had a small wound in the skin; this small wound had perforated also the abdominal cavity so that three coils of small intestine were prolapsed under the large skin wound. The wounds were cleaned, intestines replaced and he also made an excellent recovery.

Tetanus.—A woman was admitted with tetanus. She gave a history of having attempted to produce an abortion by inserting Croton leaves into the vagina seven days previously; there was no other history of any likelihood of other infection and I was of an opinion that the Croton leaves must have carried in the infection. She made a good recovery.

Head Injury.—A Fijian man had his head caught between a punt and a concrete bridge. When examined on admission the lower jaw was found to be fractured in two places, the upper jaw was also fractured and was quite loose under the skin. By the kindness of Mr. Mount (Dentist) who made special metal dental splints excellent results followed and a good recovery was made.

Burns.—A number of severe burns were admitted. These were treated by first thoroughly cleansing the part whilst the patients were under an anæsthetic then applying a solution of 5 per cent. Tannic Acid in Flavine and immediately applying a covering of 10 per cent. Silver Nitrate. This gave an immediate coagulation which formed a firm covering. The solutions dry quickly and only one application is needed. This method is an advantage over the Tannic Acid treatment which requires numerous applications.

ANTE AND POST NATAL CLINICS.

Ante Natal Clinic.—This is increasing in numbers gradually. Eighty-five mothers attending with a total number of visits of 231. They were Fijians, 38; Indians, 30; Others, 17. Thirty-three mothers were admitted to the Obstetric Ward for observation and treatment.

Post Natal Clinic.—This was only started in May. Sixteen mothers attended. Fijians, 6; Indians, 7; Others, 3; with a total number of 98 visits. This is a good beginning and I think will continue as the wives of two principal chiefs are constant attendants with their babies.

Students.—The third and fourth year students have put in their usual hospital training and have done good work. This year two night dressers have been employed for night duty. This has relieved the students of ordinary night duty and has given them more time for study. Students now only do night duty on special occasions.

Hospital Alterations.—During the latter part of the year a start has been made on the building of the children's new ward. This is being erected over the medical ward which has meant that the medical ward has had to be evacuated. The patients being accommodated in the small isolation block.

A new mortuary has been built. It is spacious and airy and is situated in a more convenient position than the old one. It is a block consisting of one room for Europeans and one for Natives with a coffin room in between. There is accommodation for six bodies.

A start has also been made on the erection of new quarters for the nursing staff. This, it is hoped will be ready for occupation by the middle of 1938.

Visits.—The Board of Visitors paid their usual quarterly visits. On November 11th His Excellency the Governor visited the hospital and laid a wreath at the base of the Memorial Tablet. On Xmas Day Lady Richards visited the hospital.

X-RAY REPORT.

The number of patients examined during 1937 was 810, a decrease of 465 on 1936. The number of films exposed, 1,195, showed a decrease of 765 on the 1936 figures.

The examinations conducted were:—

Bones and teeth	..	..	..	..	533
Chests	..	..	..	..	129
Barium meals and enemata	..	..	..	..	47
Abdomen	..	..	..	..	28
Sinus and mastoids	..	..	..	..	17
Opacol (for gallbladder)	..	..	..	..	12
Uroselectan	..	..	..	..	22

REPORT BY DR. D. C. M. MACPHERSON, GOVERNMENT PATHOLOGIST, ON THE WORK OF THE PATHOLOGICAL AND RESEARCH DIVISION.

The total number of examinations carried out during the year was 5,731, being a decrease of 393 on the total for 1936. This decrease is mainly accounted for by the marked decline in the number of throat swabs submitted for examination for suspected diphtheria, and of specimens for investigation in connection with diseases belonging to the Typhoid and Food Poisoning groups.

Staff.—Dr. D. C. M. Macpherson, Government Pathologist was in charge of the Laboratories during the year. In consequence of Dr. Thompson's regretted death he also continued to act as Medical Officer of Health, Port Health Officer, and School Medical Officer for Suva. Mr. E. Pery-Johnston is Technician, and Native Medical Practitioner Macu Salato is Senior Native Assistant. No changes took place in the Junior Laboratory staff during the year.

Dr. Hoodless, Principal of the Central Medical School, has continued to give valuable and much appreciated assistance and advice in connection with morbid histology.

Additional Equipment.—The new laboratories and equipment have given every satisfaction in operation. Among the major items of apparatus purchased during the year were a Bolton and Williams Photo-Electric colorimeter, Cambridge Electrometric titration apparatus, Leitz Freezing microtome, Sartorius air-damped Balance, Dennstedt Electric organic combustion furnace, Kjeldahl apparatus for six simultaneous estimations, electrically heated, Soxhlet apparatus for six simultaneous estimations, electrically heated, Electric Stirrer, Sodium vapour lamp, and Micro-distillation apparatus.

Special Grants.—The sum of £500 (Fiji) was donated by the International Health Division of the Rockefeller Foundation for the purpose of purchasing additional biochemical equipment. This makes a total contribution of £4,200 by the Foundation towards the building and equipment of these laboratories.

In 1936, prior to the completion of the buildings, the laboratories were visited by Lord Trent, Chairman of the great British firm of Boots Ltd., chemical manufacturers and druggists. Later visits were paid by two other directors and the production manager of the company. The interest shown by these gentlemen resulted in an offer by the Directors of Boots Pure Drug Company to contribute a sum of £500 (sterling) towards the cost of purchasing additional equipment for the teaching of laboratory subjects to students of the Central Medical School. This munificent offer was gratefully accepted by Government.

Teaching.—A number of post-graduate students were attached for varying periods to the laboratories during the year, and received practical instruction in Clinical Parasitology, Bacteriology and Pathology. A course of lectures in these subjects combined with demonstrations was also given to the students of the Central Medical School and European probationer nurses at the Colonial War Memorial Hospital. A course in Forensic Medicine and Toxicology has been instituted and was given to medical students of the third year.

Police.—The Pathologist is also Police Surgeon, and the duties of this post involved an unusual amount of both clinical and laboratory work in 1937. A number of the cases were of considerable medico-legal interest, requiring protracted and patient investigation. The precipitin test for human blood was carried out several times, in addition to the usual microscopic, chemical, and spectroscopic tests. Sir Herbert Dowbiggin, Commissioner of Police for Ceylon, was an interested visitor to the laboratory.

Animals.—Rabbits, guinea pigs, white rats and white mice were imported from New Zealand and installed in the animal house. All have remained healthy, but although the rats and mice have bred well, neither rabbits nor guinea pigs have shown their usual prolific rate of increase. A special proclamation by His Excellency the Governor in Council was required to authorise the importation of these rabbits—the first, it is believed, ever to enter the Colony.

Research.—The whole time of the present staff is very fully occupied with routine work and teaching, and little time can be found for participating in special research. The Secretary of State for the Colonies has accordingly been requested by Government, and has agreed, to bring the facilities possessed by these laboratories to the notice of the Medical Research Council and the various British Schools and Departments of Tropical Medicine, in order that the incumbents of research scholarships and fellowships may consider the claims of Fiji and the Western Pacific Territories as an important and interesting field of research in tropical diseases. The Governments of Australia and New Zealand have similarly been approached. It is the intention of this Administration to place at the disposal of adequately trained research workers who wish to carry out original investigations which not only may benefit the inhabitants of the Colony but add to the sum of medical knowledge, all hospital and laboratory resources of the Medical Department.

Visitors.—Many distinguished medical men and others have visited the laboratories during the year. Of special interest to the staff was the visit of Emeritus—Professor Sir Robert Muir M.D., Sc.D., F.R.C.P., LL.D., the doyen of British Pathologists, a remarkable number of whose former students, inspired by his genius and enthusiasm as a teacher and scientist, occupy University chairs and other leading positions in Pathology and Bacteriology throughout the English-speaking world. Lord McGowan, the distinguished Chairman of Imperial Chemical Industries, was also an interested visitor.

SUMMARY OF EXAMINATIONS PERFORMED DURING 1937.

Total number of examinations of faeces for dysentery (A & B.)	734
Positive Shiga	124
" Flexner	19
" Schmitz	10
" Sonne	9
" Entamoeba histolytica	6
" Balantidium coli	2
Total number of examinations for typhoid and food-poisoning	137
Positive B. Typhosus	10
" B. Enteritidis (Gärtner)	1
Total number of—	
Kahn Tests performed	286
Throat swabs examined for K.L.B.	83
Sputa examined for T.B.	163
Agglutination Tests performed	96
Blood counts performed	321
Blood cultures	39
Biochemical examinations	52
Occult blood examinations	10
Milk examinations	49
Water examinations	230
Pus examinations	13
Puncture fluid examinations	28
Urine examinations	183
Venereal disease examinations (other than Kahn)	108
Autogenous vaccines prepared	16
Pathological specimens sectioned and mounted	55
Blood group examinations	44
Total number of stools examined for worms and ova	1,948
Positive for hookworm .. 653 = 33.5 per cent. of total examined.	
" trichuris 146 = 7.4	
" ascaris 58 = 2.9	
" oxyuris 40 = 2.0	
" trichostrongylus .. 14 = 0.7	
" hyemonolepis nana .. 6 = 0.3	
Total number of rats for B. Pestis	616
Miscellaneous examinations not included above but inclusive of autopsies and medico-legal investigations	529
Total of all examinations performed in the Laboratory for 1937	5,731
Total of all examinations performed in the Laboratory for 1936	6,124
Decrease during 1937	393

In addition to the above, 689 bottles of anti-typhoid vaccine, valued at £775 2s. 6d. and 24 bottles of staphylococcal vaccine, valued at £27, were prepared during the year. Fourteen clinical photographs were taken, developed, and printed.

MEDICAL EDUCATION OF NATIVE RACES BY DR. D. W. HOODLESS.

INTRODUCTION.

During the last twenty years there have been numerous education conferences, commissions, and committees in nearly every part of the world, and a vast number of reports on native education have been published. In addition to these reports, educated men and women, many of whom have spent a lifetime among native races, have published their own individual reports, thus adding to the complexity of this subject. At the present time, therefore, an educational officer in any state or colony is almost unable to keep in touch with the amazing ramifications of the accumulated mass of educational reports, pamphlets, books, and theses. There is, however, one term which is continually being repeated in almost every one of these reports. This term is the hyphenated word "culture-contact." Teachers of every description, government, mission, professional, amateur, have all now realised that in the education of native races the essential difference is that a system of European culture is being engrafted upon a totally different native culture of the indigenous race of the country concerned.

The so-called educational training of any native race is generally divided by a European educationalist into the following divisions: (1) primary, (2) secondary, (3) vocational or technical, and (4) professional. The European educationalist has gone forth to every country or clime where it was possible for him to go, and with the very best intentions in the world has made up his mind that the four rungs of the education ladder as he knows it are the very best mental training for every boy and girl and youth that may cross his path. Even now, with the term "culture-contact" staring him in the face, he finds the greatest difficulty in adapting his teaching practice to the person being taught rather than to the subject-matter which he thinks he ought to teach.

If "culture-contact" means anything at all, surely it must provoke any educationalist to keep in mind the fact that his aim should be to train natives to be better and still better natives, and not to train natives to be even perfect imitation of Europeans.

The title of this article is "Medical Education of Native Races," but before one can enter into a discussion of this, some brief reference must be made to the more elementary kinds of education for native races, since these are essential as a foundation for the ultimate medical education. A brief examination will immediately show that it is impossible to generalise so as to include such diverse types as, for example, the inland tribes of Papua on the one hand, and let us say for example the Sudanese races on the other hand. In fact, education of native races, speaking generally, may roughly be divided into the following groups:—

- (1) races with very little contact with Europeans, *e.g.*, in Papua;
- (2) races with moderate contact with Europeans, but where there are no large cities and the native races retain a greater part of their old style of living, *e.g.*, in Fiji;
- (3) races with still more contact with Europeans, in countries where there are large cities and industrial centres;
- (4) races with centuries of contact with Europeans, and possessing forms of culture in literature, religion, and art, *e.g.*, in Ceylon.

This article will concern itself more particularly with the first two only of these groups, for it is fairly obvious that in countries for which the Sudan and Ceylon may be regarded as more or less typical, there will exist for the favoured few an opportunity of proceeding within their own area, to the highest professional attainments if financial circumstances so permit.

PRIMARY EDUCATION.

The question has often been asked, "Are native races such as the Fijians educable up to the European standard?" Personally I am prepared to state that given equal facilities, a healthy average Fijian youth, if taken early enough, can be educated to exactly the same extent and in every way similarly to any European youth.

However, it may be stated that in Fiji at the present time the broad principle underlying primary education in this Colony is to give the native boy and girl a simple form of education which will tend to make him or her a better Fijian in every respect: with the accent on the word Fijian. It is found, however, that it is impossible under modern economic conditions to exclude a certain measure of Europeanisation of the Fijian race. In the old days their "education" consisted of a natural process of acquiring a knowledge of their spoken languages, and a simple acquisition by purely imitative methods of house-building, boat-building, and all the various forms of practical "education." The very fact that their spoken languages were reduced to a written form by the early Missionaries, and that the natives were then taught to write, was the first step in the Europeanisation of this or any other native race such as the Fijian. It is futile for certain persons to continue to repeat *ad nauseam* that "We must not Europeanise the Natives." Teaching them to write even their own mother tongue: teaching them the use of ordinary coinage and simple money sums: teaching them the use of soap, kerosene lamps, &c., all these things are just as much Europeanising the Fijian as teaching him to write and speak English.

Throughout the Pacific at the present time it may be stated definitely that those in control of primary education are endeavouring to divorce a native boy or girl as little as possible from his native surroundings. Every effort is being made to keep him happy and contented on his native soil, while at the same time the economic and social progress of the native races is being kept in mind.

HIGHER EDUCATION.

In an article such as this it is not necessary to give in detail an account of the secondary and vocational types of educational training which are available for a certain number of Fijian boys and girls. It is sufficient to state that for the last fifty years there has been an opportunity for any keen native youth to advance in his educational training in order to become a native missionary, native clerk, or a native teacher, &c. The Missionary Societies in Fiji were in the main part responsible for this further education. The first Government school for Fijians was not opened until 1906; and the official Education Department was not commenced until 1916. It is interesting to note, however, that twenty years before there were any Government schools for Fijians, and thirty years before there was an Education Department, a former Chief Medical Officer, Dr. G. Corney, had inaugurated a system of training Fijian medical students for a certificate which would enable them to practice medicine and surgery among their own kith and kin.

MEDICAL EDUCATION AMONG FIJIANS.

The origin of the system of training Native Medical Practitioners in Fiji was probably due to a consideration of the devastating measles epidemic in 1875, and also to the fear that small-pox might be introduced into Fiji from an immigration vessel from India. In order to make vaccination less costly and more easily available, it became necessary to inaugurate a system of training native medical assistants, and the Native Medical Practitioners Ordinance was passed in June, 1888. The first three certificates to qualified Native Medical Practitioners were granted in November, 1888, and six more certificates were awarded during 1889. From that date up to 1905, a qualified native medical practitioner received £5 per year from his Province and £2 10s. 0d. a year from the Government, and he was not allowed to demand any reward for his services, but might accept any gift that any person offered to him. In 1905, the salary scale was increased to £18-£50 per annum, and in 1917, the scale was increased to £30-£50, £50-£75, and £75-£100. Again in 1926 these scales were changed to £45-£75, £75-£120, and £120-£150.

For several years after 1888 the number of students remained at eight, and a balance of gains and losses left the number of Native Medical Practitioners at about 20. These were in practice in the various Provinces in the Colony. At first the supervision of this medical training was entirely in the hands of Dr. Corney and his equally enthusiastic Matron, Miss M. C. Anderson. As time went on the number of students gradually increased up to 16-18, divided into three years, with five or six students in each year of training, and the teaching staff was increased to four.

The opening of the Colonial War Memorial Hospital at Suva in 1923 soon gave rise to the idea of developing the old Fiji Medical School into a Central Medical School, to which native students from other island groups might be admitted. In 1927-28, with the assistance of the Rockefeller Foundation, the Central Medical School was built. In this connection the services of Dr. S. M. Lambert of the Rockefeller Foundation proved invaluable not merely in obtaining financial assistance from the Foundation but also in making personal contact with the various medical departments and Administrations which were willing to co-operate in the combined scheme.

The number of Fijian students has continued to be 18, and to these must be added two or three Fijian post-graduate Native Medical Practitioners who return to the School for refresher courses. The number of students from distant island groups was 20 in 1929, and has since been increased up to 24. These latter students include native youths from Tonga, Western Samoa, Eastern Samoa, Gilbert and Ellice Islands, New Hebrides, Cook Islands, British Solomon Islands, and Nauru.

Annual reports on the Central Medical School, Fiji, have been regularly published, and reference should be made to these reports for detailed particulars concerning the native medical students, their courses of study, examination results, and a general outline of this scheme of medical training. A copy of the Annual Report on the Central Medical School for 1937 is attached as Annexure I to this article.

Quite a large number of eminent people have visited the Central Medical School, Fiji, during the last eight years. Among these visitors there have been medical men of high standing from many parts of the world. Perhaps it has been due in a large measure to the unique novelty and unexpectedness of finding South Sea natives, dressed in native costume, who are capable, of giving excellent demonstrations in anatomy; for this or other reasons, these visitors have without exception been so full of praise that they have gone away with high impressions and perhaps without an understanding of the limitations and restrictions which must necessarily be attached to this medical training in Fiji.

Numerous articles on the Central Medical School in Fiji have already been written during the last few years. To anyone who is desirous of obtaining exact information not only in regard to the Central Medical School itself, but also in regard to the Native Medical Practitioner service in Fiji as a whole, the following three articles may be recommended for perusal:—

- (1) "Native Medical Practitioners," by Dr. A. Montague, in the *Native Medical Practitioner Journal*, November, 1930.
- (2) "Native Medical Education in the Pacific," by Dr. A. H. B. Pearce, in the Report of the Second International Pacific Health Conference, Sydney, September, 1935.
- (3) "The Native Medical Practitioner in the Pacific," by Dr. V. W. T. McGusty and Dr. T. Clunie, in the *Tropical Diseases Bulletin*, November, 1936.

Each of these three articles has been written by medical officers who have had a close, intimate and personal contact, spread over a number of years, with this medical training in Fiji. In addition, and as already mentioned the multifarious details of the medical training given at the Central Medical School in Fiji are set out in the official Annual Reports, copies of which will be sent on application.

THE NATIVE MEDICAL PRACTITIONER SERVICE IN FIJI.

Under the old Fiji Medical School at which the medical training was given in the native language, the number of qualified native practitioners gradually increased from 10 in 1890, 17 in 1900, 33 in 1920, to 46 in 1929, in which year the Central Medical School was opened. Since 1929 the number of Native Practitioners has further increased from 46 to 67. These 67 represent the remaining balance of qualified Native Medical Practitioners out of a total of 172 to whom certificates have been granted since 1888. This loss of 105 over a period of 50 years has been due to death, resignation, dismissal, &c. An examination of the number of qualified Fijians who have left the medical service during the last ten years shows an average loss of two each year, and corresponds with the above figure of 105 over 50 years. At the present time, although there are nominally five Fijian medical students in each year of the four-years' course of training, the average number of Fijian students who qualify is only four per year. Hence it is seen that the net increase in the number of Fijian Medical Practitioners is only two each year, and at the present rate it will take another twenty years to build up a corps of 100 qualified practitioners.

The cost of the Native Medical Practitioners was approximately £75 for ten of them in 1890, and this has risen to £7,500 for 67 in 1937. The chief reasons for this large increase in the total cost are:—

- (1) the abolition of payment of taxes in kind and payment of salary of certain native officials in money instead of communal services, and
- (2) the marked increase in the cost of living, more especially from 1914 onwards.

If it were possible to comprehend and to evaluate the many direct and indirect effects that the formation of an auxiliary medical service of qualified Native Medical Practitioners has had upon the Fijian race, it would then be possible also to determine whether the results have been worth the cost measured in £ s. d. Without attempting to make a critical and complete survey, it cannot be denied that the Native Medical Practitioner service in Fiji has brought a reasonable measure of Western medical treatment to all the 100,000 of the Fijian population. In fact it has been stated that the arrest of the decline in the Fijian population, and the present satisfactory increase are both due in a very large measure to the good work of the Native Medical Practitioners. The present 67 Fijian Native Medical Practitioners form an integral part of administration of the Colony, and they may be regarded in one sense as the basis on which the public health and hygiene of the Fijian race is maintained. It should be added, however, that the control, guidance, and general direction of these Native Medical Practitioners by a dozen European medical officers is absolutely essential.

NOTE ON THE CENTRAL MEDICAL SCHOOL IN SUVA IN RELATION TO THE
HEALTH PROBLEMS OF THE PACIFIC BY DR. V. W.T. MCGUSTY, O.B.E.

There is in Suva an institution known as the Central Medical School, where young natives from Fiji and other Pacific islands receive a four years' course in medicine followed by a qualifying examination which entitles them to practise as *Native Medical Practitioners*, and assures them of medical careers in the service of their respective administrations.

To the Colony of Fiji belongs the credit of instituting the native medical practitioner system, the other participating administrations with their approximate populations being as follows:—

British Solomon Islands Protectorate (United Kingdom) ..	94,000
Gilbert and Ellice Islands (United Kingdom)	33,700
Tonga (Kingdom)	29,000
Western Samoa (New Zealand)	47,000
Eastern Samoa (United States of America)	10,000
Cook Islands (New Zealand)	11,500
Niue (New Zealand)	4,000
New Hebrides (Condominium)	55,000
Nauru (Australia)	1,600
	285,800
Fiji (native population)	97,000
	382,800

THE NATIVE PEOPLES OF THE SOUTHERN PACIFIC.

The administrations participating in the native medical practitioner scheme contain representatives of each of the three main subdivisions of the Pacific islanders—namely, Polynesians, Micronesians and Melanesians; and, while there exists as between Polynesian and Micronesian, on the one hand, and Melanesian, on the other, marked differences both in physical characteristics and mental capacity, all of the three peoples, prior to European intervention, were in the neolithic stage of civilisation. Similarities in diet and climate, and the diffusion of culture which resulted from the great Polynesian migrations that are said to have taken place in spite of primitive craft and vast ocean distances, have tended further towards the creation of affinities and the obliteration of differences in the form of their social systems. Since the communal form of society is found to be more or less universal in its distribution, it is a factor of great importance in preparing a form of government suited to the character and requirements of the Pacific islanders, and the ultimate success of any public health undertaking depends on the extent to which it can be moulded into the framework of their society. In the realm of disease, affinities are taken a step further, because, with the exception of malaria, which is confined to the New Hebrides and Solomon Islands, identical problems arise everywhere as regards both indigenous diseases and those which have been introduced with European colonisation.

THE INCEPTION OF THE NATIVE MEDICAL PRACTITIONER.

The native medical practitioner service owes its being to Dr. B. G. Corney, an early Chief Medical Officer of Fiji, who seems, in the first instance, to have conceived the idea of using young natives as public vaccinators and dispensers, and, later, encouraged by their success in these capacities, to have determined upon giving them a more comprehensive training and much more responsible duties in the capacity of native medical practitioners.

The first eight students to qualify as native medical practitioners received their certificates in January 1889. The health situation at that time in Fiji can only be described as most precarious. The Colony had been under British rule for but fifteen years, and the natives, under the influence of the Christian missions, were only just emerging from a state of savagery. To the many indigenous diseases there had been added a host of others which were introduced by the European colonists with tragic results to the non-immune natives; and public health work was obstructed on all sides by prejudice and superstition. In the absence of sufficient revenue to provide for an adequate health service, it was necessary, if the United Kingdom was to discharge her responsibilities, to find a solution at once cheap, rapid and conforming with native custom to deal with the very serious problem of disease in these very susceptible people. These were the actual circumstances in which Dr. Corney inspired the creation of the native medical practitioner service.

THE CENTRAL MEDICAL SCHOOL.

The earliest students, limited in number to eight, learned their profession in the wards of the old Colonial Hospital, where they worked as dressers and male nurses and received clinical instruction at the hands of the Resident Medical Officer. In 1901, the amenities of the school were improved by the provision of better housing for students, a lecture theatre and rudimentary teaching equipment. During succeeding years, theoretical teaching was incorporated in the syllabus, while the practical side of the course also improved with the steady increase in the volume of work at the Colonial Hospital.

Until 1927, the Medical School was purely an institution of the Fiji Government, but changes in its constitution were already in the course of preparation, for the International Health Division of the Rockefeller Foundation, seeking an economic and effective means to make premanent the result of its health campaign among the native peoples of the other southern Pacific islands, found the solution of its problem in the native medical practitioner system, which had then been in successful operation in Fiji over a period of more than thirty years. As a result of negotiations

conducted between the Foundation and the Government of Fiji, and of generous financial assistance from the Foundation, the buildings and equipment of the Suva Medical School were extended and improved in time for it to be opened in 1928 as the Central Medical School, with forty students in residence, who were drawn from seven separate Pacific administrations.

Coincident with these events, the system of teaching was expanded and reorganised. A full-time tutor, whose title has now been changed to principal, was appointed to take charge of the school, and lectureships in the subjects of a course similar to that of an ordinary medical college were distributed among local doctors and other persons, who willingly undertook the duties of honorary lecturers. In 1931, the period of studentship was increased from three to four years, and in 1935 the teaching facilities were further enhanced by the addition of a well-equipped pathological laboratory and the appointment to take charge of it of a highly qualified pathologist.

English has to be used as the medium of instruction to overcome the difficulty of teaching students whose mother tongues differ widely from each other. The careful selection of candidates, including an entrance examination, ensures, as far as possible, that the students are competent to take the course. As the school contains students of East Indian, Polynesian, Micronesian and Melanesian origin, differences in educational standards and intellectual capacity throw a serious burden on the principal.

The Central Medical School is essentially a Government institution and is financed by the contributions of the participating administrations, such contributions being proportionate to each administration's quota of students. The full cost of maintaining a student at the school was £73 (Fiji) in 1934, so that the cost to his Government of each student's full course of training amounts to approximately £300 (Fiji).

From its inception until the end of 1936, 195 native medical practitioners have graduated from the Central Medical School.

PRESERVATION OF NATIVE CHARACTER IN NATIVE MEDICAL PRACTITIONER SERVICE.

Reference has been made to the fact that all natives from the administrations participating in the Central Medical School scheme observe communal habits of living. *The aim of the Central Medical School* is to fit its graduates for the normal responsibilities of medical practitioners and health officers without removing them from their native environment. The success of the native medical practitioner service depends on its conforming with native society, and its maintenance at an economic level that is within the capacity of each administration. Students at the Central Medical School are, therefore, encouraged to dress themselves after the manner of well-born natives, and to retain as many of their native habits of living as it is possible under conditions of studentship. When the young graduates return to their homes with a wholesome respect for the manners and customs of their own people, they regain their proper place in native society, whence they can most readily spread the knowledge they have acquired, and where they do not tend to covet living standards above those of their tribal chiefs. On the other hand, any attempt to raise the status of the school to the level of a European medical college would inevitably result in the graduates leaving their native environment and, in consequence, to an increase in the cost of the native medical practitioner service that would defeat the object for which the Central Medical School was created.

THE INDIAN MEDICAL PRACTITIONER.

With the increase of the East Indian population of Fiji, the Government decided to train Indians to be medical practitioners on the same lines as Fijians. The first East Indian graduates received their certificates in 1925; but, owing to the individualistic habits of Indians, the service, while of undoubted value, is less suited to their requirements than to those of the Fijians, and the number of Indian medical practitioners has been restricted for the present to ten.

THE NATIVE MEDICAL PRACTITIONER IN PRACTICE.

The distributions of native medical practitioners among the administrations where they are now serving is as follows:—

Fiji	62
British Solomon Islands Protectorate ..	4 (including one Fijian)
Gilbert and Ellice Islands	10 (including one Fijian)
New Hebrides	1 (a Fijian)
Eastern Samoa	Nil (in training)
Western Samoa	10
Cook Islands	3
Nauru	Nil (in training)
Tonga.. .. .	7

As a rule, each native medical practitioner is assigned a medical district where he controls the health of the native population, and in some cases of all other sections of the community as well. Every native medical practitioner is nominally controlled by a European medical officer, but the degree of his responsibilities is in practice fixed by the extent to which communications are available. It is extremely important that the work of native medical practitioners should be subject to regular inspection; but, as this is not always practicable outside of Fiji, it has been satisfactory to find that graduates of the school are, in the main, capable of dealing on their own initiative with the great majority of medical and health problems.

The native medical practitioner is essentially a State servant who has been accustomed from studentship to a system of State medicine. As rigid control by Government is regarded as

essential to the efficient maintenance of this service, no private students are accepted at the Central Medical School, and the right to practise is restricted as closely as possible to the holders of Government appointments.

The course of training emphasises operative surgery and fits most of the graduates to contend with ordinary surgical emergencies. It also stresses public health and preventive medicine, and it is in this sphere that the value of the native medical practitioner is highest. The conditions are very similar in all the Southern Pacific territories, and the native medical practitioner is competent to deal with ordinary epidemics, such as dysentery and enteric, to carry out the mass treatment of ankylostomiasis, yaws and ringworm, and to conduct preventive measures, such as soil sanitation, and infant welfare. It would be difficult to devise a better solution of the health problems of the Pacific islanders under the conditions that now prevail.

CONCLUSIONS.

None of the administrations participating in the native medical practitioner scheme could afford to embark on expensive medical services; but, by a pooling of resources in the Central Medical School undertaking, it is believed that they will be able to elaborate a common form of health organisation that will meet the requirements of their native populations. The system is still in an experimental stage in most places, but the success that has been obtained in Fiji justifies the hope that the results will prove favourable in other places.

While the scheme was evolved to meet the special circumstances of communally-living South Sea islanders, experience with the individualistic Indians, although less successful, has also proved it capable of modification to meet other conditions.

Its main essentials are economy and the maintenance of the native medical practitioners as closely as possible at the economic level of the people amongst whom they work, and these considerations are liable to be overlooked by over-enthusiastic supporters, as well as by destructive critics.

REPORT BY DR. D. W. HOODLESS ON THE CENTRAL MEDICAL SCHOOL, SUVA.

Students.—During the year there were 43 students in residence at the two dormitories. The following table shows the race of the different students in each year:—

	1st year.	2nd year.	3rd year.	4th year.	Post-graduates.	Total.
Western Samoa	2	2	2	.	1	7
Eastern Samoa	.	1	1	.	.	2
Tonga	1	2	1	.	.	4
Cook Islands	.	1	2	.	.	3
Gilbert and Ellice Islands ..	2	1	1	1	.	5
Solomon Islands	1	1	1	1	.	4
New Hebrides	.	.	.	1	.	1
Nauru	1	.	1	.	.	2
Fiji—Fijians	6	4	4	.	2	16
Rotumans	1	.	.	.	.	1
Indians	.	.	1	.	1	2
	14	12	14	3	4	47

The four post-graduates in the above list were qualified Native Medical Practitioners, and only one of them, the Samoan, resided in the students' dormitory. During 1937, one of the Fijian students in the 2nd year was dismissed in June owing to lack of progress in studies, one Tongan student in the 2nd year was certified as medically unfit, and the three students in the 4th year completed their period of training so that on December 31st, 1937, the number of students and post-graduates was reduced to 42. Lectures will recommence on Monday, January 17th, 1938, for 38 students and 4 post-graduates, and there will be no new entry class during 1938.

Health.—One Tongan student certified to be suffering from pulmonary tuberculosis had to discontinue his studies in October, and he finally returned to Tonga on January 3rd, 1938. No other cases of serious illness amongst the students have occurred during 1937. This was in marked contrast to the record for 1936 when numerous minor cases of measles and mumps and several serious cases of pneumonia occurred. The diet scale provided for the students is a liberal one, and includes an ample supply of animal fat and green vegetables. A careful supervision has been continuously maintained over the health of the students generally, but, as one would expect, the health record of the students depends largely upon that of the native population in Suva for the students mix freely with their native friends in Suva both at games and during their leisure hours. All the medical students, if not already protected, were vaccinated against smallpox and inoculated against typhoid fever, and the latter inoculation will be repeated in their third year. In spite of the risk, which of course is run by all persons doing medical work, of daily contact with infectious cases, the good health of the students may be attributed to:—(a) adequate facilities for sports and games, (b) a good dietary, and (c) early and adequate medical treatment of all minor illnesses.

Discipline.—The discipline of the students has continued to be excellent throughout the current year. Reference has been made in previous annual reports to several interesting factors which ensure a very good *esprit de corps* among the students. The ages of the students range from 17 years to 25 years and this age-range covers the most difficult period in the life of a native youth. By means of a system of lectures and practical work regularly maintained, and by means of class examinations held every three months a constant check is kept in the progress made by each student. This constant routine of theoretical and practical work acts as probably the chief factor in maintaining good discipline and order. At the same time it must be admitted that no success could be achieved without the enthusiasm which each and every student puts into his work. One of the complications which have arisen during recent years is the ever-increasing Europeanisation of the native races in the Pacific, and this has gradually crept into the social life of the native medical students. The Cook Islands students are almost completely Europeanised and wear trousers, shoes, &c., and the Fijian student in his short loin-cloth and bare feet looks with envy at his Cook Islands colleague if they are both on night-duty and the mosquitoes are bad. Every endeavour is made to encourage the Fijian student to remain true to his own culture and customs, but it is obviously impossible to give a medical training to these native students from Fiji, Tonga, and Samoa, &c., without at the same time giving a large measure of Western culture. We cannot throw away the test-tube and the microscope and go back to the methods of the old bush-doctor with his herbs and mystic incantations.

Boarding arrangements.—All the students are boarders, and there are two Indian cooks who prepare and serve the meals. The present kitchen is much too small for the amount of cooking which is necessary. When the new cement dormitory is built it is anticipated that adequate facilities will be provided for the cooking and serving of meals. In addition to the two Indian cooks there is one Indian laundryman. Each student is allowed to send ten articles to the laundry each week.

The whole of these boarding arrangements for the students, or what one may call the domestic side of the Medical School, were apparently constructed on the basis of the old Fiji medical school prior to 1929 when the number of students was never more than 18 in all. When the new electric laundry is erected for the Hospital there will be no need for a separate hand laundry for the students. It would probably also be much more economical to arrange for one large general kitchen so that meals could be prepared under European supervision not only for hospital patients but for the 40 native medical students, the 20 Fijian nurses, and the large Indian staff of servants.

During 1937 the average total cost per student was £74, which included £26 for food and £2 for laundry expenses.

Courses of studies.—In 1931 the course of studies was extended from three years to four years. This four years' course is divided into a junior period of 1½ years followed by a senior period of 2½ years. The junior students receive instruction in Physics, Chemistry, Biology, Anatomy and Physiology, and attend the Medical School every morning and afternoon. The senior students are on duty in the hospital from 8 a.m. to 1 p.m. each day, and attend lectures in the afternoons or evenings by the members of the honorary staff which include twelve lecturers, eight of whom are Medical Practitioners. The senior students act as dressers and clinical assistants in the hospital, and form an integral part of the staff of the hospital under the direction of the Medical Superintendent. The duties of the senior students in the hospital include work in the medical wards, surgical wards, women's wards, European wards, the hospital dispensary and out-patients. Strictly speaking the junior students are not required to do any hospital duty, but in actual practice one or more of them volunteer every afternoon for relieving duty in the out-patients department or for "special-duty" while the senior students are at lectures; and again, during the Christmas and mid-year holidays all the junior students put in four weeks of relieving duty in the hospital so that the senior students may take their own holidays.

Funds were made available for 1937 so that students will no longer be required to do "night-duty" in the hospital. As the new men selected for this work had had no medical training it was necessary for senior students to continue for the first three months of the year in order to train the new night-duty attendants.

When the Central Medical School was opened in 1929 a printed syllabus of studies was prepared, but it was soon found that a formal syllabus in any one subject could not be rigidly followed. In practice it has been much more satisfactory to allow each lecturer complete freedom in his own subject, and the position is safeguarded by appointing a co-examiner who is entitled to set and mark half the total number of questions in each final or qualifying examination.

The following text-books are in general use by the students:—Wheeler and Jack's *Handbook of Medicine*; R. L. Spittel's *Essentials of Surgery*; E. C. Mekie's *Handbook of Surgery*; Hale White's *Materia Medica*; Henry Jellett's *A Short Practice of Midwifery for Nurses*; and *Anatomy, Physiology and Hygiene* by A. M. Ashdown and E. Bleazby. In addition, several copies of the larger text-books in each subject are available for occasional use by the students. It is pleasing to be able to report that during 1937 several of the students bought their own copies of Buchanan's *Anatomy* and Rose and Carless' *Surgery*.

Examinations during, 1937.—During 1937 there were only three students taking the final fourth year course. One of these had failed in two subjects in December, 1936, but he was successful in completing his final subjects in September, 1937, when he returned to the Gilbert and Ellice Islands for service there. Owing to my absence on vacation leave during 1934 it was intended that no new students were to be admitted in that year, but two students from distant islands turned up and had to be admitted. These two students completed their four years' period of training in December, 1937; one of them qualified, and the other failed, and each returned to his own island group, namely, the British Solomon Islands and the New Hebrides. In passing, it may be noted that although at first sight it would appear to be more regular and advantageous to have 10 students in each of the four years there are several other advantages obtained by having 13 or 14 students in each of three years and none in the remaining year, and that this arrangement is in force at present. Another method would be to have 20 students in each alternate year, but this has not yet been tried out, although it would undoubtedly give the Principal an opportunity of following the junior students into the Hospital for six months and bridging over that difficult step from book-learning to clinical practice.

Third-year students.—Regular class examinations were held each quarter during 1937 for the 14 students in this year. At the December quarterly examinations, 4 failed in Medicine, 5 in Surgery, none in Public Health, and 2 failed in Forensic Medicine. There is only one student in this year who has failed to make satisfactory progress.

Second-year students.—In January, 1937, there were 13 students in this year, and the usual quarterly class examinations were regularly held. At the second professional examinations held in June, 1937, one of the Fijian students failed both in Anatomy and Physiology and his studentship was terminated. Another student from Samoa failed in Physiology only, but he subsequently passed in this subject in September. A third student, a Gilbertese, who had been very seriously ill with pneumonia and empyema, made a complete recovery after four months' convalescence at Lautoka, and on his return to the Medical School was put back with the first-year class, and his progress in studies has been satisfactory. This year of students changed over in July from the Medical School to commence their clinical work in the hospital. At the written examinations held in December, 4 students failed in Medicine, 4 in Surgery, and 2 in *Materia Medica*. Three students in this year are definitely below the average standard at written examinations.

First-year students.—There were 13 students in this year in January, 1937, and all were successful at the qualifying examinations in Biology, Physics and Chemistry in June, 1937. As explained above the number of students became 14 after the mid-year vacations, and all of them were successful at the quarterly examinations in Anatomy and Physiology held in September and December, 1937.

Class prizes and medals.—Neither of the two students who qualified in 1937 was up to medal standard in any subject, and therefore the four gold medals usually awarded annually to fourth-year students on the results of the final qualifying examinations were not awarded during 1937. The Administration of Western Samoa has also given a gold medal in memory of the late N.M.P. Ielu Kuresa. This fifth medal will be awarded annually to the best student at the examinations in Diseases of Children and Infant Welfare.

The only medal awarded during 1937 was Sir Henry Scott's gold medal in Anatomy which was awarded to Tevita Moakiola Fotu. The list of the class prize-winners is as follows:—

First Year.

Physics	Uiliami Tufui (Tonga).
Biology	Siaosi Tuioti (W. Samoa).
Chemistry	K. Mara Uluilakeba (Fiji).
Anatomy	Siaosi Tuioti (W. Samoa).
Physiology	Siaosi Tuioti (W. Samoa).

Second Year.

Anatomy	Tevita M. Fotu (Fiji).
Physiology	Amosa Sio (W. Samoa).
Medicine	Samiuela Taumoebeau (Tonga).
Materia Medica	Tevita M. Fotu (Fiji).

Third Year.

Medicine	Terenuku Williams (Cook Is.).
Surgery	Peti Tofaeono (W. Samoa).
Public Health	Livai Volavola and Uraia Naqasima (Fiji).
Forensic Medicine	Peti Tofaeono (W. Samoa).

Fourth Year.

(No class prizes awarded).

A special prize donated by the Pacific Islands Club in Sydney was awarded to Geoffrey Kuper (Solomon Is.), in the fourth year.

An analysis of the lists of class prize-winners for the last seven years gives the following percentages:—Fiji, 36 prizes or 34.6 per cent.; Western Samoa, 23 prizes or 22.1 per cent.; Tonga, 21 prizes or 20.1 per cent.; Cook Islands, 14 prizes or 13.4 per cent.; all others, 10 prizes or 9.6 per cent. It must be noted however that out of the average number of 40 students about 18 are Fijians, 4 are Samoans, 4 are Tongans, 2 are Cook Islanders and 12 are included in the words "all others."

Lecturers.—The following list gives the names of the lecturers and the subject taken during 1937:—

Obstetrics	Dr. A. H. B. Pearce.
Surgery	Dr. W. Worger.
Medicine	Dr. E. V. Maxwell.
Public Health and Hygiene	Dr. S. M. Lambert.
Diseases of the Eye	Dr. C. H. B. Thompson.
Bacteriology	Dr. D. C. M. Macpherson.
Anæsthetics	Dr. I. H. Beattie.
Dentistry	Dr. L. B. Hart.
Forensic Medicine	Dr. D. C. M. Macpherson.
Materia Medica	N.M.P. Filikesa.
Anatomy and Physiology	Dr. D. W. Hoodless.
Chemistry	Mr. W. J. Blackie.
Biology and Physics	Dr. D. W. Hoodless.
Book-keeping	Mr. C. A. Brabant.

In addition, numerous demonstrations in practical and clinical work were given by the members of the European nursing staff, and the qualified Native Medical Practitioners on the staff of the Hospital, and by Mr. J. E. Pery-Johnston at the Bacteriological Laboratory.

Games.—The Central Medical School Rugby team played regularly from April to September, 1937, and were placed fourth out of eight teams in the native section of the Fiji Rugby Union. In addition to these football games it is very pleasing to be able to report that at last after many unsuccessful attempts we have been able to inaugurate a United Cricket Association for native cricket teams. Up to the present only six teams have joined but it is anticipated that three or four more cricket teams will be formed in due course. The Central Medical School cricket team has won all its games this season up to the present and we are hoping to win the Carpenter Challenge Shield for 1937–1938. Ample facilities for sports and games are provided for all the medical students. Lawn tennis is regularly played when the weather permits, and a full-sized boxing ring is rigged up on Friday evenings for amateur bouts. In addition, there are two ping-pong tables which are freely used at all times.

The members of the Central Medical School Advisory Board wish to place on record their deep appreciation of the generosity of Dr. I. Hamilton Beattie in presenting St. Luke's playground to the Medical School and Hospital. This new playground, when the levelling, &c., has been completed, will be large enough for football and cricket matches. It is situated on the south side of Brown Street and near to the proposed site of the new dormitory.

Terms and vacations.—The school year is divided into four quarters, commencing on January 15th and ending on December 15th. The students are given two weeks' holiday at Christmas and again at the end of June. Half the number of students are away for two weeks, and then the other half have two weeks' holidays. There are therefore two periods of four weeks each when no lectures are given. In December this year there were only two students for whom arrangements had to be made for their return to their native homes. The Medical School will reopen on January 18th, 1938, with 42 students and post-graduates, and as the dormitory accommodation is full there will be no entry class for 1938.

Board meetings.—Three meetings of the Central Medical School Advisory Board were held during 1937, with the Director of Medical Services, Dr. A. H. B. Pearce, as Chairman. The other members of this Advisory Board were Dr. S. M. Lambert of the Rockefeller Foundation, Dr. W. Worger, Acting Medical Superintendent of the Colonial War Memorial Hospital, and Mr. H. Vaskess, Secretary to the Western Pacific High Commission. Dr. D. W. Hoodless was secretary to the Board during 1937. The Board continued to carry out its routine business of recommending the award of certificates to newly-qualified Native Medical Practitioners, deciding the number of new students to be admitted from each participating Administration, selecting the new Fijian students for the following year, and making suitable recommendations on lectures, courses of studies, regulations, disciplinary measures, and improvements to buildings. One of the most important matters considered by the Board during 1937, has been the question of admitting "Mission" students to the Medical School. Up to the present all students have been selected by one or other Administration and after qualification have been given employment by the Administration which selected them and which has paid for their medical training. We have now received applications from two recognised Missions asking for permission for some of their students to be medically trained at the expense of the Mission and then subsequently to serve as Mission Native Medical Practitioners. The members of the Board are willing to try out this new arrangement provided certain conditions are fulfilled, but as there is no available dormitory accommodation at present the proposal will have to be postponed for two or three years.

Visitors.—The number of visitors to the Central Medical School during 1937 was 73, as compared with 75 during 1936, and 125 during 1935. Among the distinguished visitors this year were Professor Sir Robert Muir of Glasgow, Lord McGowan of London, Sir Edmund Spriggs of Ruthin, Sir Henry Brackenbury of London, and Lady Richards. Many of the medical visitors are from Australia or New Zealand, and during their short stay of six hours in Suva they take pleasure in visiting the Medical School and in reviving their memories of student days while listening to the native medical students giving black-board and practical demonstrations in anatomy. Other medical visitors are mostly from Europe and America, and pass through Suva on a world tour. Sir James Barrett's article on the Central Medical School printed in *Nature*, September 11th, 1937, has given a wide publicity to the medical school, but it ought to be emphasised that the daily routine work of the qualified Native Medical Practitioners in the country districts is of vastly more importance than the more spectacular medical training of the students.

Finance.—The annual cost per student for the years 1930 to 1936 has been:—1930, £76 13s. 5d.; 1931, £75 17s. 5d.; 1932, £75 4s. 10d.; 1933, £76 19s. 2d.; 1934, £73 4s. 3d.; 1935, £72 2s. 6d. and 1936, £70 17s. 6d. The exact figure for 1937 is not yet available, although it has been estimated at £74 approximately. This annual expenditure covers board and lodgings, tuition fees, maintenance expenses, clothing, servants' wages, and a small pocket money allowance of 10s. per month per student. It will be seen therefore that each student costs about £75 per annum, so that the four years' course of studies costs about £300 per head, to which must be added any extra expenditure for transport to and from Fiji. The original capital expenditure for buildings, &c., was about £170 per student and a proportion of this capital expenditure must be added if the total cost of training a Native Medical Practitioner is to be estimated. This proportion is different for each participating Administration, and varies in accordance with the maximum number of trained men required, e.g., Western Samoa with a population of 47,000 will probably require 25 qualified men but the Cook Islands with a population of 15,000 only will probably require 8 men only.

It may be added that the assisting monetary contributions paid by the Rockefeller Foundation of New York ceased in 1932, and since that time no grants-in-aid have been received from Imperial or other sources.

The total annual expenditure is calculated from January 1st to December 31st, and the exact amount is known by March 31st of the following year. This amount is then divided among the nine participating Administrations in the ratio of the number of student-month units. The actual practice up to the present has been to send out accounts about the middle of the year debiting Tonga, for example, with four times £75 and then later on to credit that Administration with the difference between that amount and the actual expenditure incurred for Tongan students at the Medical School.

The Medical School and the N.M.P. Service in Fiji.—The first N.M.P. certificate was signed on 12th November, 1888, and since then 197 certificates have been issued to qualified Native Medical Practitioners. Of these, 42 are for other than Fijians so that 155 remain for graduates from Fiji. Of these 155 qualified men only 67 (60 Fijians and 7 Indians) are now in actual practice in the Fiji Government service. The average number of Fijian students who qualify each year is four, and there is an average annual loss of two. In Fiji there is one N.M.P. for every 1,600 of the Fijian population, and if the seven Indian Medical Practitioners and the 86,000 Indian population are included there is one qualified man for 2,700 of population. I have estimated that to build up a corps of 100 qualified Fijian practitioners the present system of medical training must continue until 1950, but this date may be greatly extended if any very serious epidemic occurs. During the influenza epidemic of 1918-19 no less than eight qualified men (out of a total of 48) died within 10 weeks.

The Medical School and other N.M.P. Services.—At the present time an endeavour is being made to build up a Native Medical Practitioner service in other island groups in the South Seas. The following list shows the Administrations associated with Fiji in the present system of medical training:—

Administration.	Population.	Number of N.M.P's at present.	Number of students-in-training.	Estimated number of N.M.P's required.	Estimated year in which training will be completed.
Solomon Islands	94,000	5*	3	30 to 50	1970
Gilbert and Ellice Islands	34,000	11*	4	20	1946
Tonga	29,000	7	4	16	1946
Western Samoa	47,000	10	6	25	1946
Eastern Samoa	10,000	0	2	5 or 6	1946 or 7
Cook Islands and Niue	15,000	2	3	8	1943
New Hebrides	55,000	1*	0	20 to 30	?
Nauru	1,600	0	2	3 or 4	1943

* Includes one Fijian N.M.P. on transfer.

From the above list it will be seen that both Nauru and the Cook Islands will have obtained the necessary number of trained Native Medical Practitioners by the end of the year 1943, and that except for an occasional post-graduate course there will be no need for either of these Administrations to continue in the scheme of co-operation after another six years.

If my estimated figures are correct it would appear also that the Gilbert and Ellice Islands, Tonga and Western Samoa will have each obtained the maximum number of Native Medical Practitioners required by the end of the year 1946. In each case, however, the number of Native Medical Practitioners is sufficiently large to warrant a regular return of one qualified man back to Fiji each year for post-graduate training. By means of this extension the scheme of co-operation may be continued indefinitely with these three Administrations. It may also be stated that for an Administration such as that of Western Samoa with a population of 47,000 and for which it may be estimated that 25 Native Medical Practitioners are necessary, there will be an annual loss of one qualified man (or perhaps only two every three years) owing to death, resignation, dismissal, &c. In order to maintain the number of Native Medical Practitioners in Western Samoa after 1946 at the level of 25 it will therefore be necessary to go on training one new medical student each year.

As mentioned in three previous annual reports the agreement between the groups co-operating in the Central Medical School, which agreement was to last for 10 years in the first instance, will be subject to discussion before the end of that period in November, 1938. This is necessary in order that any modifications may be made. So far no official discussions have taken place between the various Administrations in regard to the conditions which should prevail during the second period of 10 years, namely from 1939 to 1948.

Conclusion.—No annual report on the Central Medical School would be complete without due acknowledgment of the assistance given to the School by the members of the honorary staff and of the general direction and control exercised by the Director of Medical Services, Dr. A. H. B. Pearce. This acknowledgment is now made, and it is made on behalf of all the students, juniors and seniors, for the cordial and friendly relationship which has existed during 1937 between all members of the staff and all the students.

Suva, December, 30th, 1937.

D. W. HOODLESS,
Principal.

REPORT BY DR. W. G. MACNAUGHTON, MEDICAL SUPERINTENDENT, CENTRAL
LEPER HOSPITAL, MAKOGAI.

I took over the duties of Medical Superintendent, Makogai on the 17th July, 1937, from Dr. C. J. Austin who proceeded on leave.

The island of Makogai is divided into two areas, on one end is situated the farm and here the "clean" labour live, the other is for patients, who as far as possible are allowed to live their own lives, in communities according to nationality. The two areas are connected by a motorable road which is about three miles in length.

Communication with the outside world is maintained by an auxiliary cutter, stationed at Makogai, and goods are brought, for the most part, from Levuka which is about seventeen miles away.

Over two thousand patients have been admitted since the inception of the Hospital, although some, during the early days, were here for only short periods.

The year closed with the record number of patients 577 which was two more than in 1935.

During the latter part of the year, Makogai experienced very dry weather which gave some anxiety, although the patients' gardens did not appear to suffer to any great extent.

The nursing staff consists of fifteen European Sisters of the Society of Mary and ten Native Sisters. Thanks to their loyal co-operation and devotion to duty, the work of looking after the patients has been carried out in an efficient and pleasant manner.

TABLE I.—STATISTICS FOR THE YEAR 1937, CENTRAL LEPROSY HOSPITAL, MAKOGAI.

	European.			Half-Caste.			Fijian.			Melanesian.			Indian.			Rotuman.			Chinese.			Samoan.			Maori.			Niue Is.			Cook Is.			Tongan.			Gilbert Is.			Total.		
	M	M	F	M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F				
In the hospital 1/1/37 ..	3	4	1	84	40		39	7		145	47		27	22		9	12		5	1		1	3		25	25		6	9		25	15		381	174		555					
Admissions ..	..	2	2	19	9		5	..		26	6		6	2		1	..		..	..		1	1		..	..		..	..		..	..		..	..		60	20		80		
Deaths ..	1	..	..	9	..		2	..		3	1		2	1		1	..		..	..		..	..		3	1		1	..		1	..		..	..		24	3		27		
Discharges ..	..	..	..	5	2		5	1		5	2		4	3		..	..		..	..		..	1		..	3		..	..		..	..		..	..		19	12		31		
Total inmates in the hospital 31/12/37 ..	2	6	3	89	47		37	6		163	50		27	20		9	11		5	1		2	3		22	21		5	9		24	15		398	179		577					
Total ..	2	9		136	43		213	47		9	16		1	5		43	14		39																							

It will be noted, that as in previous years the number of Indian patients is still high. The number of conditional discharges was eleven more than during the previous year, and the number of deaths was reduced by half. The Gilbert and Ellice patients who were mostly advanced cases on arrival seem now to be holding their ground.

TABLE II.—ADMISSIONS, 1937.

	Neural 1.	Neural 2.	Neural 3.	Cutaneous 1.	Cutaneous 2.	Cutaneous 3.	Total.
Half-Caste ..	1	1	..	1	1	..	4
Fijian ..	6	18	..	4	4	..	28
Indian ..	3	14	..	4	11	..	32
Solomon Islanders ..	2	1	..	..	2	..	5
Chinese ..	..	..	..	1	..	..	1
Rotuman ..	3	2	..	1	2	..	8
Niue Islanders ..	..	..	..	2	..	..	2
Totals ..	15	36	..	9	20	..	80

From Table II which shows admissions classified according to type and nationality also indicates conclusively that cases are being received in the earlier stages of the disease, particularly with regard to Fijian patients.

TABLE III.—RACE IN RELATION TO TYPE OF LEPROSY.

	Neural 1		Neural 2		Neural 3		Cutaneous 1		Cutaneous 2		Cutaneous 3				Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
European ..	..	..	..	..	..	..	..	..	2	..	..	..	2	..	2
Half-Caste ..	..	1	..	1	..	..	1	..	5	1	..	..	6	3	9
Fijian ..	17	7	28	26	1	1	13	4	34	7	7	..	100	45	145
Indian ..	15	4	21	12	..	2	41	9	76	16	4	3	157	46	203
Solomon Islanders ..	12	1	8	3	..	..	7	2	9	1	1	..	37	7	44
Rotuman ..	5	5	13	3	..	..	..	1	9	2	..	..	27	11	38
Cook Islanders ..	2	2	8	..	..	1	4	4	5	11	1	..	20	18	38
Gilbert Islanders ..	5	2	1	3	..	..	3	1	11	4	4	4	24	14	38
Samoan ..	1	..	1	1	..	..	..	..	7	3	..	1	9	5	14
Chinese ..	..	..	1	..	..	..	..	..	4	..	4	..	9	..	9
Tongan ..	..	1	2	1	..	1	..	2	2	3	1	1	5	9	14
Niue Islanders ..	..	1	..	..	..	..	..	1	2	1	..	..	2	3	5
Maori ..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
	57	24	83	50	2	5	69	24	166	49	22	9	399	161	
Total ..	81	133	7	93	215	31	560								560

The above Table shows the type of leprosy in relation to nationality as well as making a comparison as to the relative frequency of infection in males and females. The 560 patients surveyed are those who have been long enough in the institution to show some response to treatment. Although it would appear that the Indian patients, having a higher percentage of Cutaneous cases, are in worse condition than other races it is a curious fact that they eventually improve much more rapidly than others, and actually far fewer really "advanced" cases are seen among them. It is to be noted that with the exception of the Tongan and Niue Island patients the percentage of females is considerably less than that of males.

TREATMENT.

As in the past, patients have been encouraged to live as hygienic a life as possible, and every effort has been made to relieve the monotony of their existence which is of necessity restricted to a certain degree. Gardening, public works, fishing and other pursuits are indulged in and picture shows are given. Those whose infirmities render it impossible to engage in an active outdoor life are placed in the central portion of the hospital.

As for specific therapy, iodised Chaulmoogra oil is given weekly by intramuscular injection, as this has been found to be less painful and by result equal to other preparations. The oil itself is also taken by mouth by most of the patients.

The injection of the ethyl esters of dilo (*Calophyllum Enophyllum*) still retains its popularity in the treatment of nerve pains and in some cases undoubtedly is of great value.

Methylene Blue injected into the nodules also has given, in some cases, good results, although on the whole its use has not been followed by marked improvement.

Table IV shows the number and type of injections given.

TABLE IV.

1937.	Injections.						Total of injections.	Dressings.	Patients dressed.	Operations.	Autopsies.	Laboratory examinations.			Total of Laboratory examinations.
	Chaulmoogra oil.	Salvarsan.	Dilester.	Manganese.	Methylene blue.	Insulin.						Urine analyses.	Bacteriological examinations.	Parasitic examinations.	
January ..	1,625	15	22	24	44	38	22	1,790	7,854	3,298	.	70	21	3	94
February ..	1,451	10	22	17	74	28	9	1,611	6,672	2,755	.	77	32	19	128
March ..	1,189	9	42	20	66	31	4	1,361	7,218	3,222	1	66	23	4	93
April ..	1,636	4	44	10	56	30	.	1,780	6,715	3,230	7	46	2	1	49
May ..	1,312	21	39	10	35	50	46	1,513	7,002	3,366	1	67	54	13	134
June ..	1,587	5	52	13	36	49	33	1,775	6,630	3,417	.	65	72	40	177
July ..	1,781	13	32	6	33	44	34	1,943	6,930	3,384	.	64	35	5	104
August ..	1,816	19	15	10	27	43	13	1,943	7,380	3,546	4	62	23	9	94
September ..	2,039	27	27	5	13	71	9	2,191	7,225	3,149	.	78	73	39	190
October ..	1,477	55	27	13	8	87	59	1,726	6,494	3,315	.	72	119	55	246
November ..	931	56	53	10	.	80	6	1,136	7,146	3,456	.	70	30	25	125
December ..	1,359	22	20	2	.	91	32	1,526	6,715	3,281	5	75	33	62	170
Totals ..	18,203	256	395	140	392	642	267	20,295	83,981	39,419	18	812	517	275	1,604

RESULTS OF TREATMENT.

TABLE V.—RACE RELATED TO PROGRESS.

	Arrested.		Quiescent		Improved		Stationary.		Worse.		Died.				Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
European ..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	2
Half-Caste ..	..	..	..	..	3	2	3	1	..	..	..	..	6	3	9
Fijian ..	11	2	25	8	29	23	21	6	5	6	9	..	100	45	145
Indian ..	5	..	53	10	63	31	27	2	8	3	1	..	157	46	203
Solomon ..	..	..	..	..	10	3	12	4	9	..	6	..	37	7	44
Rotuman ..	1	1	10	1	11	6	4	2	1	1	..	..	27	11	38
Cook Islanders ..	..	..	9	..	2	12	5	5	4	1	..	..	20	18	38
Gilbert Islanders ..	..	..	5	4	11	3	7	6	1	1	..	..	24	14	38
Samoan ..	..	..	3	..	3	4	3	..	1	..	..	..	9	5	14
Chinese ..	..	..	..	..	3	..	5	..	1	..	..	..	9	..	9
Tongan ..	..	..	..	..	1	5	4	2	..	2	..	..	5	9	14
Niue Islanders ..	..	..	..	..	1	2	..	1	1	..	..	..	2	3	5
Maori ..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1
	17	3	115	26	141	92	89	25	27	15	10	..	399	161	560
Total ..	20	..	141	..	233	..	114	..	42	..	10	..	..	..	560

The response to treatment is given in the above Table. (Arrested = freedom from activity for at least two years. Quiescent, for at least six months). If for the purpose of comparison Fijian and Indian figures are taken, it will be seen that although, as shown in Table III the percentage of Neural cases among Fijians is higher than that of the Indians (55 per cent. Fijian, 26 per cent. Indian) that Indians appear to respond more readily to treatment.

	<i>Fijians.</i> <i>Per cent.</i>	<i>Indians.</i> <i>Per cent.</i>
Arrested.	8	2.5
Quiescent	22.7	31
Improved	35.8	46.3

The numbers of advanced Cutaneous cases is the same for both races which would indicate a slightly higher percentage among Fijians.

With regard to other races mentioned in Table V the numbers are too small to gain any useful information.

TABLE VI.—TYPE OF LEPROSY RELATED TO PROGRESS.

	Arrested.	Quiescent.	Improved.	Stationary.	Worse.	Died.	Total.
Neural 1	7	37	24	6	6	1	81
Neural 2	6	61	44	13	6	3	133
Neural 3	1	..	2	3	1	..	7
Cutaneous 1	3	24	52	7	6	1	93
Cutaneous 2	2	17	107	68	18	3	215
Cutaneous 3	1	2	4	17	5	2	31
Total	20	141	233	114	42	10	560

Although many of the Cutaneous cases, as compared with the Neural, show an improvement they have unfortunately a tendency to do otherwise, also fewer of them appear to be able to advance to the "arrested" stage.

Of the total number of "Arrested" cases this year 70 per cent. are Neural in type and among the "Quiescent" 69.5 per cent.

These figures seem to prove beyond doubt that the Neural cases are more satisfactory from the point of view of ultimate cure, especially when compared with those of previous years, at the same time it should be noted that Cutaneous 1 cases have a definite tendency to improve.

SEX INCIDENCE.

Of the patients in review 399 are males and 161 females, that is 71.2 per cent. males. Males show 35.6 per cent. and females 49 per cent. of Neural cases, but of the total number of women patients only 1.8 per cent. are "arrested" against 4.5 per cent. males. "Quiescent" figures show 16.1 per cent. females and 28.8 per cent. males, while a larger proportion of females (57 per cent. against 35 per cent.) have "improved."

DEATHS DURING 1937.

The number of deaths during the year was twenty-seven of which fourteen were due to leprosy and its sequelæ.

The following are the causes of death:—

Leprotic "exhaustion"	9
Septic absorption	3
Nephritis	5
	— 17
Pulmonary Tuberculosis	4
Generalised tuberculosis	2
	— 6
Pericarditis	1
Aortic Aneurism	1
Cerebral hæmorrhage	1
Cerebral thrombosis	1
	— 4
	27

PUBLIC WORKS.

Apart from the erection of new buildings the work of renovating and improving old ones has steadily been going on and at the end of the year this had almost been completed, so that in future years maintenance costs may be reduced considerably.

The new buildings were a "type" house for Fijians, the female "advanced" ward and an extension to a building in the Indian village.

All work in the hospital area is carried out by the patients under the supervision of the Department of Public Works. They work in gangs, the carpenters, the plumbers, the painters and last but not least the mechanics.

No one is forced to work, but the patients all appreciate the fact that work is a necessary adjunct to treatment and owing to this, many a youth who has entered Makogai not knowing a trade has gone forth able to take a useful place in the world.

MAKOGAI PRODUCE.

During the year produce to the value of approximately £1,000 was bought from the patients for use in the hospital.

Eggs issued to the hospital numbered 9,764 and fowls 379 from the poultry run attached to the hospital, which is managed by Reverend Mother, assisted by the Native sisters.

From Nasau over 10 tons of beef and 210 lb of dripping as well as 5,685 gallons of milk were issued. Goats which are abundant are much appreciated by the Indian patients.

The bakery is situated in the clean area and loaves issued to the hospital amounted to 64,853, while the sale of bread produced £201.

Almost six tons of locally-produced soap was issued to the hospital.

About four and a half gallons of Chaulmoogra oil were produced from the trees grown on the island.

The Co-operative Store still is much patronised by the patients and the year's turnover amounted to £2,526. The Canteen at Nasau also continues to show a fairly large margin of profit, £115.

RAINFALL 1937.

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
6.755	11.53	14.59	6.165	8.195	1.58	1.735	3.765	1.03	5.025	.715	8.85	69.935

The rainfall was not altogether satisfactory from the point of view of the water supply and to augment this, it was found necessary to sink several wells. It is to be hoped that next year a supplementary supply will be available.

VISITORS.

Official visitors during the year included His Excellency, the Governor, Sir Arthur Richards, the Director of Medical Services, the Commissioner of Works and Mrs. Wise, the Secretary for Indian Affairs, the Secretary for Native Affairs, Miss Lea, Matron of Suva Hospital, Messrs. Noerr Bros., Dr. Bennett, H.M.S. Leith, Drs. Macpherson, R. Maxwell, E. Maxwell and Mr. Pinder, Government Auditor.

The visit of Dr. F. Hall I think calls for special mention as he was mainly responsible for making Makogai the success that it undoubtedly is.

ANNUAL REPORT ON WESTERN PACIFIC HEALTH SERVICE

BY DR. S. M. LAMBERT FOR THE YEAR 1937.

Sanitation Campaign.—Work has continued during the year being confined to the island of Viti Levu. Two sections, the provinces of Colo North and the Rewa Delta, uncompleted previously largely owing to natural difficulties, have been completed. The sanitary campaign while on a small scale is continuous from year to year. The statistics for the year follow:—

PERIOD FROM 1ST JANUARY, 1937, TO 31ST DECEMBER, 1937.

District.	No. homes surveyed.	No. holes dug.	No. holes bored.	No. slabs supplied.	No. peds. supplied.	No. completed.
Rewa (Indian and Others)	477	605	57	68	14	625
Tailevu Province (Fijians) .. .. .	.....	563	.....	.....	1	508
Suva .. .. .	.....	.....	.....	31	11	.....
Colo East Province (Fijians) .. .. .	.....	10	.....	.....	10	10
Rewa Province (Fijians)	46	46	.....	38	8	46
Ra (Indians and Others) .. .. .	.....	.....	.....	107	6	.....
Colo North Province (Fijians) .. .. .	.....	605	.....	8	22	561
Naitasiri Province (Fijians) .. .. .	.....	32	.....	.....	.....	32
	523	1,861	57	252	72	1,782

Manufactured: 304 squatting slabs, 75 pedestals.

Tuberculosis and General Survey.—There are almost no reliable morbidity data in the Pacific. Information about pulmonary tuberculosis is especially desirable. My former assistant, Malakai, was sent to the Gilberts and Ellice as Senior Medical Native Practitioner. I was allowed to choose another, Vakatawa, an especially brilliant student, from the 1936 graduating class. During the early part of the year he was given special clinical instruction by Doctors Cramer and Hoodless and training in sputum examination in the laboratory. By the end of the year he had surveyed Colo East, one of the mountain provinces, completely for general morbid conditions, giving each tuberculin tests, an examination of the lungs, and a sputum examination of all suspicious cases. It is believed that the survey of this province is as complete as possible. The people are easy to check as each turanga-ni-koro (mayor) has a list of the inhabitants of the village. At least it is a valuable yardstick of pulmonary tuberculosis in mountain provinces of Fiji and probably as accurate as such a survey could be. Vakatawa is highly trained and he is thorough.

It is planned to continue this work in various provinces so that a true picture of native pulmonary tuberculosis is obtained.

The census of 1936 for the province was 3,247. Vakatawa surveyed 3,141, which considering people away casually and signed-on labor means practically a clean-up of the province. We are indebted to the District Commissioner, Mr. Reay, for the co-operation which made this thoroughness possible.

INTRACUTANEOUS TUBERCULIN TEST (STANDARD OLD TUBERCULIN).

	Census, 1936 3,247			Examined. 3,141			Positive. 1,803		Negative. 1,338			Per cent Positive. 57							
Age Groups.	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	over	Adults.	Child.	Total
	4	9	14	19	24	29	34	39	44	49	54	59	64	69					
Male Positive ..	5	39	92	42	48	60	69	53	56	45	45	23	43	14	35	218	..	887	
Negative ..	167	161	103	26	16	14	11	10	6	7	7	2	6	4	3	30	74	617	
Female Positive ..	4	34	78	52	96	120	61	49	46	40	37	8	23	9	16	243	..	916	
Negative ..	159	187	99	25	36	20	13	9	7	3	11	4	1	0	1	42	74	691	
Per cent. total popu- lation positive ..	2.68	17	46	65	73	84	84	84	89	89	82	84	90	85	93	86	..	57	
Per cent. Male posi- tives ..	1.49	9	25	29	24	28	45	44	49	47	45	62	59	52	64	41	..	58	
Per cent. female positives ..	1.19	8	21	36	49	56	40	41	40	42	37	22	32	33	39	46	..	57	
Positive by sputum ..	..	..	1	1	2	2	2	1	1	1	1	..	1	1	1	..	..	15	
Positive clinically ..	..	..	2	1	2	5	4	1	3	4	6	2	2	1	1	..	..	34	

There are two groups classified one as adults and another as children because their age could not be accurately obtained. By tuberculin test the sexes are about equal in infection. In the 15-30 groups the greater percentage of female positives is worth noting.

The last two figures give positives by sputum and positives clinically. They are not inclusive, the total positives in the province being reckoned at 49. Only 15 of all suspicious cases in the province were positive by sputum examinations. Of these four were women. Clinically 8 out of 34 positives were women.

Goldminers.—There has been great interest in the question of the effect of the new gold mining industry, which draws its labor supply from Fijians, on pulmonary tuberculosis among Fijians. This point was kept especially in mind during the survey. One hundred and thirty-six adult male Fijians found in the survey of this province had had one or more terms of service on the Tavua goldfields. By tuberculin tests, 83 per cent. were positive which is greatly in excess of

RETURN OF DISEASES AND DEATHS AT THE COLONIAL WAR MEMORIAL HOSPITAL
FOR THE YEAR 1937.—continued.

Disease.	Admissions.					Deaths.	Disease.	Admissions.					Deaths.
	Europeans.	Fijians.	Indians.	Others.	Total.			Europeans.	Fijians.	Indians.	Others.	Total.	
ALIMENTARY SYSTEM.							DISEASES OF MALE ORGANS.						
Diseases of Teeth and Gums ..	6	2	4	..	12	..	Phimosis and Paraphimosis ..	2	..	2	2	6	..
Diseases Salivary Glands ..	1	..	..	..	1	..	Epididymitis and Orchitis ..	2	..	10	..	12	..
Oesophageal Stenosis and Diver- ticula ..	..	..	..	1	1	..	Hydrocele ..	..	8	1	2	11	..
Dyspepsia (Acute and Chronic, Functional) ..	3	3	6	2	14	..	Ectopia Testis Undescended and Imperfectly descended Testi- cle ..	1	..	..	..	1	..
Gastric Disorders, Acute Gas- tritis ..	4	8	2	1	15	..	Enlarged Prostate Gland ..	1	..	1	1	3	..
Peptic Ulcer Gastric ..	1	..	5	..	6	..	Elephantiasis of Scrotum ..	..	4	..	1	5	..
Peptic Ulcer Duodenal ..	2	..	..	..	2	..	Total ..	6	12	14	6	38	..
Congenital Hypertrophic Pyloric Stenosis ..	1	..	..	..	1	1	DISEASES OF PREGNANCY						
Constipation ..	1	12	21	4	38	..	LABOUR AND PUERPERIUM.						
Diarrhoea ..	2	4	4	2	10	..	Normal Pregnancy ..	..	9	27	5	41	..
Enteritis and Gastroenteritis ..	5	8	13	1	27	2	Normal Labour ..	..	87	79	45	211	1
Food-poisoning ..	2	7	..	2	11	..	Abortion threatened ..	..	1	2	..	3	..
Intestinal Obstruction ..	..	3	1	..	4	4	Abortion or Miscarriage ..	11	6	14	7	38	..
Foreign bodies in Stomach and Intestines ..	1	..	1	..	2	..	Premature Labour ..	..	..	1	1	2	..
Viscerotoposis ..	2	..	1	..	3	..	Hydatidiform Mole ..	..	..	1	..	1	..
Colitis ..	..	..	1	1	2	..	Extra Uterine Pregnancy ..	..	1	..	..	1	..
Diverticulosis and Diverticulitis ..	1	..	..	..	1	..	Accidental Haemorrhage ..	..	..	1	..	1	..
Intestinal Parasitosis ..	..	1	17	1	19	2	Placenta Praevia ..	..	..	1	..	1	1
Perianal & Ischiorectal Abscess ..	..	1	7	..	8	..	Toxæmia of Pregnancy Hyper- æmia Gravidarum ..	..	..	2	..	2	..
Anal Fissure and Fistula ..	1	..	..	..	1	..	Toxæmia of Pregnancy Albu- minaria of Pregnancy ..	..	..	1	..	1	..
Hæmorrhoids and Rectal Pro- lapse ..	9	2	4	..	15	..	Toxæmia of Pregnancy Ec- lampsia ..	1	..	4	..	5	2
Amœbic Hepatitis and Hepatic Abscess ..	..	..	1	..	1	1	Other diseases occurring during Pregnancy ..	..	..	4	1	5	..
Catarrhal Jaundice ..	..	..	1	..	1	1	Multiple Pregnancy ..	..	3	..	..	3	..
Cirrhosis of Liver ..	..	..	1	..	1	..	Obstructed Labour ..	..	..	1	1	2	..
Cholecystitis and Cholangitis ..	1	1	4	..	6	..	Acute Inversion of Uterus ..	..	..	1	..	1	..
Cholelithiasis ..	..	1	..	..	1	..	Other Obstetric Operation ..	..	1	..	..	1	..
Other diseases of Alimentary System ..	..	..	3	1	4	1	Postpartum, Haemorrhage ..	..	..	1	..	1	..
Total ..	41	53	97	16	207	12	Retained Placenta ..	..	1	1	1	3	..
APPENDIX AND PERITONEUM.							Puerperal Sepsis ..	1	1	1	..	3	1
Appendicitis, Chronic ..	13	..	6	4	23	..	Forceps Deliveries ..	..	1	..	1	2	..
Subacute ..	13	2	5	5	25	..	Total ..	13	111	142	62	328	5
Simple Acute ..	5	1	..	1	7	..	DISEASES OF WOMEN.						
Acute Peritonitis ..	1	1	..	..	2	..	Disorders of Menstruation ..	5	..	6	2	13	..
Peritoneal Adhesions ..	..	..	2	..	2	..	Sterility ..	1	..	..	..	1	..
Total ..	32	4	13	10	59	..	Malformation of the Genital Organs ..	..	..	1	..	1	..
HERNIA.							Inversions of Uterus Non-Puer- peral ..	..	..	2	..	2	..
Inguinal Hernia, Oblique and Indirect ..	3	7	5	3	18	..	Retroversion of Uterus ..	5	..	2	..	7	..
Inguinal Hernia ..	..	2	..	..	2	..	Uterine Prolapse ..	1	..	5	..	6	..
Ventral Hernia ..	2	..	..	..	2	..	Infections of Vulva and Vagina ..	1	..	2	..	3	1
Strangulated Hernia ..	..	1	..	..	1	1	Other lesions of Vulva & Vagina ..	1	1	1	..	3	..
Total ..	5	10	5	3	23	1	Chronic Endometritis and Endo- cervicitis ..	4	..	1	..	5	..
DISEASES OF URINARY SYSTEM.							Salpingitis & Orophoritis except Tuberculosis ..	..	4	6	1	11	..
Acute Nephritis ..	1	..	3	..	4	1	Pelvic Abscess ..	..	..	1	..	1	..
Chronic Nephritis ..	1	..	2	1	4	1	Benign Uterine Tumours ..	..	..	1	..	1	..
Hydronephrosis & Pyonephrosis ..	1	1	..	..	2	..	Ovarian Tumours and Cysts ..	3	2	2	1	8	..
Perinephritis and Perinephric Abscess ..	1	..	..	..	1	..	Subinvolution ..	..	..	2	..	2	..
Polycystic Kidney ..	1	..	..	..	1	..	Total ..	21	7	32	4	64	1
Urinary Calculi Renal ..	1	..	1	..	2	..	DISEASES OF BREAST.						
Ureteric ..	..	..	1	..	1	..	Acute Mastitis & Breast Abscess ..	2	4	..	1	7	..
Cystitis, Acute ..	4	..	2	1	7	..	DISEASES OF NEW BORN						
Cystitis, Chronic ..	1	..	2	..	3	..	INFANCY, EARLY CHILDHOOD.						
Enuresis ..	..	..	..	1	1	..	Other Congenital Malformations ..	1	..	..	..	1	..
Other diseases of Urinary Sys- tem ..	2	..	..	..	2	..	Sepsis of Cord and Umbilicus ..	..	1	2	..	3	3
Retention of Urine ..	..	..	1	1	2	..	Prematurity ..	..	5	5	..	10	10
Total ..	13	1	12	4	30	2	Malnutrition and Marasmus ..	..	2	7	1	10	9
							Infantile Convulsions ..	..	..	3	..	3	2
							Born in Hospital ..	..	94	88	37	219	..
							Other diseases of early infancy ..	1	1	..	..	2	1
							Total ..	2	103	105	38	248	25

RETURN OF DISEASES AND DEATHS AT THE COLONIAL WAR MEMORIAL HOSPITAL
FOR THE YEAR 1937.—continued.

Disease.	Admissions.					Deaths.	Disease.	Admissions.					Deaths.
	Europeans.	Fijians.	Indians.	Others.	Total.			Europeans.	Fijians.	Indians.	Others.	Total.	
DISEASES OF BONES, JOINTS, MUSCLES AND TENDONS.							DISEASES OF THE SKIN.						
Acute Osteomyelitis	..	..	2	1	3	..	Furunculosis	4	..	..	1	5	..
Chronic and Relapsing Osteomyelitis	..	3	2	..	5	..	Carbuncle	4	3	1	1	9	..
Periostitis	1	..	2	1	4	..	Abscess	4	22	22	5	53	..
Other diseases of bone	..	1	1	..	2	..	Cellulitis	1	1	1	..	3	1
Synovitis	..	1	10	2	13	..	Erysipelas	2	..	4	1	7	1
Acute Arthritis	..	2	2	..	4	1	Eczema	..	..	3	..	3	..
Chronic Arthritis, Osteo-Arthritis and Rheumatoid	..	2	2	1	5	..	Dermatitis	3	..	2	3	8	..
Ankylosis of Joints	..	..	..	1	1	..	Impetigo	1	..	3	1	5	..
Fibrositis and Myositis	..	1	1	..	2	..	Scabies	..	3	2	..	5	1
Lumbago	..	1	1	1	3	..	Ringworm	..	1	1	..	2	..
Total	1	11	23	7	42	1	Sinuses	1	..	3	..	4	..
AFFECTIONS DUE TO EXTERNAL CAUSES.							DISEASES OF THE EYE.						
Poisoning other than food poisoning	..	2	3	..	5	..	Conjunctivitis	1	2	1	3	7	..
Burns, Scalds	4	5	16	2	27	1	Pterygium	..	5	..	1	6	..
Bruises, Abrasions and Contusions	5	14	10	8	37	..	Iritis	..	2	..	..	2	..
Wounds, Incised, Punctured or Contused and Lacerated	13	24	23	8	68	1	Glaucoma	..	..	1	..	1	..
Septic Wounds	25	36	42	10	113	..	Cataract	..	2	3	..	5	..
Embedded foreign Bodies	1	2	2	2	7	..	Corneal Ulcer and Sequelæ	..	4	3	1	8	..
Injuries from electricity and lightning	..	1	..	..	..	..	Injury to Eye	1	..	4	..	5	..
Scalp Wounds	1	..	3	..	4	..	Foreign Body in Eye	..	..	1	..	1	..
Insect Bites and other stings from poisonous animals	1	1	1	1	4	..	Panophthalmitis	..	1	..	..	1	..
Shock following injury	1	1	..	1	3	..	Diseases of the Lids	..	4	..	..	4	..
Injuries to muscles, tendons and ligaments	1	1	2	..	4	..	Dacryocystitis	1	..	..	..	1	..
Sprains of Joints	..	4	1	..	5	..	Other diseases of the Eye	..	1	..	..	1	..
Dislocations of Joints	1	1	..	1	3	..	Total	3	21	13	5	42	..
Head injuries and Cerebral Concussions	2	5	3	5	15	..	DISEASE OF EAR, NOSE AND THROAT.						
Injuries to Chest	1	..	1	..	2	..	Acute Otitis Media	1	3	..	1	5	..
Injuries to Abdomen	..	..	1	..	1	..	Mastoiditis	..	1	..	..	1	1
Internal Viscera injuries	1	..	1	..	2	1	Chronic Otitis Media	1	..	1	..	2	..
Injuries to spine and back	1	1	..	2	4	1	Epistaxis	..	..	2	..	2	..
Fracture of Jaws and Facial Bones	1	1	..	..	2	..	Maxillary Sinusitis	1	..	2	..	3	..
Fracture of Skull	1	..	1	..	2	2	Frontal Sinusitis	..	1	..	..	1	..
Fracture of Spinal Column	2	1	..	..	3	1	Ethmoidal and Sphenoidal Sinusitis	..	1	..	..	1	..
Fracture of Pelvis	1	2	..	..	3	..	Pharyngitis	2	..	..	..	2	..
Fracture of Ribs	..	1	..	..	1	..	Acute Tonsillitis	8	..	1	..	9	..
Fracture of Clavicle	..	2	..	..	2	..	Enlarged Tonsils and Adenoids	20	3	8	1	32	..
Fracture of Humerus	..	1	2	..	3	..	Laryngitis	..	..	..	1	1	..
Fracture of Scapula	1	..	..	..	1	..	Peri-tonsillar Abscess	1	..	3	..	4	..
Fracture of Radius	..	1	1	1	3	..	Total	34	9	17	3	63	1
Fracture of Ulna	1	..	..	..	1	..	ILL DEFINED DISEASES.						
Fracture of Radius and Ulna	..	6	1	2	9	..	Admitted for Investigation or observation	22	30	26	9	87	..
Fracture of Carpus, Metacarpus and Phalanges	..	..	1	1	2	..	Pyrexia of Unknown Origin	1	2	8	..	11	..
Fracture of Femur	2	..	3	..	5	..	Undiagnosed	..	1	..	..	1	..
Fracture of Patella	..	..	1	1	2	..	Orphans	..	17	1	3	21	..
Fracture of Tibia	..	3	..	..	3	..	Parent admitted with child not ill	..	10	24	2	36	..
Fracture of Fibula	2	3	2	..	7	..	Debility	2	1	11	2	16	4
Fracture of Tibia and Fibula	1	5	2	1	9	..	Senility	..	..	3	..	3	..
Metatarsus, Tarsus & Phalanges Malunited Fracture	..	..	1	..	..	..	Ether Anaesthesia	1	..	..	..	1	1
Malformation after injury or disease	..	1	..	..	1	..	Total	26	61	73	16	176	5

Blood Vessels—	No.	Gynaecological—	No.
Excision of aneurysm of foot	1	Excision of Elephantoid Vulva	1
Ligature of External Carotid	1	Excision of Bartholin's Cyst	1
Tendons—		Colpoperrineorrhaphy	1
Lengthening Tendo-Achillis	3	Dilatation and Curettage	25
Bones—		Cæsarean Section	5
Depressed Fracture of skull	1	Hysterectomy Total	1
Bone Graft	2	Hysterectomy Subtotal	3
Suturing Patella	2	Removal Fibroid Uteri	1
Suturing Fractured Olecranon	1	Ventral Fixation (Gillam's)	4
Osteomyelitis and Periostitis	2	Tubes and Ovaries—	
Open Reduction of dislocated Toe	1	Salpingectomy	2
Amputation of Leg	2	Ruptured Ectopic	1
Amputation of Arm	3	Ovarian Tumour	1
Lymphatic System—		Ovarian Cyst	3
Thyroidectomy	2	Sterilisation	2
Alimentary System—		Breast—	
Carcinoma of Lip	2	Breast Abscess	4
Laparotomy	13	Amputation of Breast	1
Appendicectomy	41	Thorax—	
Appendix Abscess	1	Thoracotomy	1
Pelvic Abscess	1	Aspiration of Chest	1
Gastroenterostomy	1	Eye—	
Anastomosis of Intestines	1	Pterygium	4
Colostomy	2	Enucleation of Eyeball	3
Freeing Abdominal Adhesions	1	Evisceration of Eyeball	4
Intestinal Obstruction	1	Cataract	1
Punctured wound of Abdomen	1	Ear Nose and Throat—	
Hernia—		Tonsillectomy—	
Radical Cure for Inguinal Hernia	14	Tonsillectomy	25
Strangulated Hernia	1	Tonsillectomy by Dissection	3
Rectum and Anus—		Acute Mastoid	1
Excision of Hæmorrhoids	8	Cholestoma of Mastoid	1
Injection of Hæmorrhoids	4	Skin Graft	3
Fistula in Ano	2	Kondoleon's Operation	2
Sigmoidoscopy	6	Application of Radium	4
Male Genital Organs—		Removal of Lipoma	6
Radical Cure for Hydrocele	11	Minor Operations	524
Amputation of Scrotum	5	Total	639
Prostatectomy 1st stage	1	Grand total	782
Prostatectomy 2nd stage	1	Anæsthetics given—	
Undescended Testis	1	Chloroform and Aether	333
Cystoscopy	3	Ethyl chloride	3
Total	143	Evipan	6
		Spinal	10
		Gas and Oxygen	3
		Local	213
		Total	568

SURGICAL OPERATION PERFORMED ON IN-PATIENTS AT LAUTOKA HOSPITAL DURING THE YEAR 1937.

Operations.	No.	Operations.	No.
Amputations—Finger	3	Suture of perforated duodenal ulcer	1
Toe	1	Colostomy	1
at site of election	1	Hæmorrhoidectomy	56
at mid-humerus	1	Excision of ischio-rectal sinus	1
at mid-thigh	3	Perineal excision of rectum	1
of arm	1	Cure of imperforated anus	1
Toilet and amputation fractured Tibia	1	Radical cure of inguinal hernia	35
Excision of exostosis of Tibia	1	Radical cure of femoral strangulated hernia with	
Subperiosteal resection of bone and sequestrectomy	3	resection of gut and lateral anastomiasis	1
Arthrotomy	1	Evacuation of psoas abscess	1
Fasciectomy for elephantiasis	2	Nephrectomy	1
Extended amputation of breast for cancer	1	Suprapubic prostatectomy	5
Excision of—tuberculosis glands	1	Lithotomy	1
sebaceous cyst	1	Sounding of bladder	1
wrist ganglion	1	Dilation of urethra	22
Removal of toe nail	1	Radical cure of hydrocele	31
Decompression of skull	1	Excision of varicocele	1
Excision of carcinoma of skull	1	Orchidectomy	6
Schwartz mastoid	2	Amputation of scrotum with orchidectomy	1
Elevation of depressed fracture of skull	1	Ventrisuspension	3
Puncture of maxillary sinus, &c.	1	Ventrisuspension with appendicectomy	1
Resection of superior maxilla	1	Ventrisuspension with salpingos-tomy	2
Antrotomy and drainage of maxillary sinus	1	Salpingectomy	7
Reduction of fractured humerus	1	Double salpingo-oophorectomy	1
Reduction of fractured femur	2	Double pyo-salpingectomy	1
Extraction of cataractous lens	18	Ovariectomy	7
Needling of after cataract	3	Excision of tube, ectopic gestation	1
Excision of pterygium	3	Ovariectomy and salpingectomy of gravid tube	1
Keratotomy for hypopyon	5	Uterine Myomectomy	1
Enucleation of eye-ball	4	Hysterectomy, total	6
Lid splitting and grafting	12	Hystero-salpingo-oophorectomy	2
Plastic of eye	1	Hysterectomy, Wertheim's	1
Removal of foreign-body in the eye	1	Hysterectomy, subtotal	2
Removal of nasal polypus	2	Posterior colpotomy	2
Excision of malignant parotid tumour	2	Cæsarian section	4
Ligature of common carotid artery and excision of		Obstetric internal version and delivery	1
tumour	1	Forceps delivery	7
Extraction of foreign-body in cheek	1	Embryotomy	1
Extraction of teeth	21	Decapitation and eviseration	1
Tonsillectomy and Adenoidectomy	22	Induction of abortion	1
Thyroidectomy	3	Removal of retained placenta	1
Resection of rib and thoractomy	11	Dilatation and curettage of uterus	61
Drainage of pleural cavity	1	Dilatation with trachelorraphy	2
Drainage of liver abscess	1	Dilatation and amputation of cervix	1
Paracentesis of abdomen	3	Repair of vesico-vaginal fistula	1
Various laparotomies	11	Perineorrhaphy	3
Cholecystectomy	3	Skin-grafting	3
Excision of cysts of mesentery	1	Injection for varicose veins	1
Appendicectomy	18	Blood transfusion	3
Gastro-enterostomy	8	Artificial pneumothorax	88
Resection and anastomiasis of injured intestine	1	Other operations	380
Resection and anastomiasis of intestine with			
radical cure of inguinal hernia	1	Total	956

SUMMARY OF METEOROLOGICAL OBSERVATIONS AT SUVA FOR THE YEAR 1937.—*continued.*

Months.	Total Rainfall (Inches.)	Sunshine, (Hours and Tenths.)		Miles of Wind.		Weather, No. of days of				Wind. Number of Observations.																									
		Total.	Mean daily	Total.	Mean velocity (m.p.h.)	Hail.	Thunder Storms	Gales.	Clear Sky			Overcast		N	N.E.		E.		S.E.		S.		S.W.		W.		N.W.		Calms.						
									8h	14h	8h	14h	8h		14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h	8h	14h
January	8.78	215.7	7.0	4665.6	6.3	0	7	0	0	0	8	8	10	5	8	9	4	10	0	3	0	1	0	0	0	1	4	1	5	1					
February	8.29	180.7	6.5	5289.6	7.9	0	2	0	1	0	12	10	7	4	7	7	1	5	2	3	0	3	2	5	4	0	1	1	4	0					
March	17.53	178.7	5.8	4620.0	6.7	0	5	0	2	0	10	11	10	2	6	5	3	8	3	4	0	8	0	4	0	0	2	0	7	0					
April	12.13	167.2	5.6	4656.0	6.5	0	4	0	2	0	9	12	11	3	7	9	2	9	0	4	0	5	1	0	0	2	0	7	0						
May	16.49	133.1	4.3	4692.0	6.3	0	2	0	3	1	16	16	7	3	9	6	2	13	3	2	1	4	2	1	1	1	1	1	5	0					
June	2.23	161.7	5.4	4512.0	6.3	0	1	0	3	2	7	7	13	3	9	7	2	10	3	5	1	2	0	1	0	0	2	2	0						
July	4.76	85.4	2.8	5950.4	8.0	0	0	0	1	1	17	18	5	2	6	2	6	12	8	13	1	2	1	0	0	0	1	0	3	0					
August	11.46	127.4	4.1	5447.6	7.4	0	0	0	1	1	13	12	7	0	10	8	6	14	3	6	1	2	1	1	0	0	1	0	2	0					
September	6.95	136.2	4.5	5710.4	8.0	0	0	0	5	1	13	10	2	0	6	1	7	13	7	9	3	4	1	2	1	1	0	0	3	0					
October	6.63	143.6	4.6	5896.8	7.9	0	1	0	1	0	13	14	4	1	6	1	9	17	4	6	1	3	0	2	2	0	0	0	5	1					
November	5.87	232.0	7.7	5568.0	7.7	0	1	0	1	1	16	12	4	2	9	5	13	18	1	5	0	0	1	0	0	0	1	0	1	0					
December	5.51	182.1	5.9	5455.2	7.3	0	0	0	0	1	12	14	7	6	10	8	8	12	1	4	0	0	0	0	0	1	1	0	4	0					
Year ...	106.63	1943.8	5.3	62493.6	7.2	0	23	0	20	8	146	144	87	31	93	68	63	141	35	64	8	34	9	16	8	4	14	5	48	2					
Mean ..	...	...	...	.....	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				

EXTREMES FOR THE YEAR.

Highest Pressure—30.137" at 8 a.m. on 1st October.
 Lowest Pressure—29.529" at 2 p.m. on 27th February.
 Highest Temperature in Shade—94° on 15th January.
 Lowest Temperature in Shade—63° on 16th August.
 Greatest Range—17° on 16th August, 23rd September, and 16th October.
 Least Range—2° on 31st August and 18th September.
 Most rain in 24 hours—7.87" on 19th March.
 Maximum wind velocity—38 m.p.h. from S.E.x E. at 0956 on 20th August.

