Derrick, R.A. 1955. "1875: Fiji's darkest hour an account of the Measles Epidemic of 1875" In Transactions and proceedings of the Fiji Society for the years 1955-1957 6(1): 3-16 1

PRESIDENTIAL ADDRESS-1955

1875: FIJI'S DARKEST HOUR—AN ACCOUNT OF THE MEASLES EPIDEMIC OF 1875

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(Read 18th April, 1955)

The Measles Epidemic of 1875 was beyond question the gravest disaster that has overtaken the Fijians during historical times. This was Fiji's darkest hour. The death roll from measles and from supervening complications was estimated at between a quarter and a third of the Fijian population. Many of the highest chiefs were carried off, leaving the people without effective leadership at a period when effective leadership might have accomplished much. Whole villages were wiped out. And when after about three months the pestilence passed, it left the survivors weak and susceptible to other causes of sickness, so that during the following years heavy losses continued: it left the Fijian people depressed, and even in despair, many lacking so much as the will to live. It was a disastrous beginning for the new Colony. Misunderstanding by the Fijians of its causes gave rise to suspicion of treachery and sorcery, which among the hill tribes of Viti Levu found expression in reversion to heathen practices, and among the western tribes to savagery and cannibalism culminating in open rebellion.

At the time of cession the Fijian population was estimated at 150,000. The first reliable census, taken in 1881, recorded 114,748, thus showing a probable loss of more than 35,000. There is some evidence that decline had set in long before cession; it continued during more than twenty-five years following the measles epidemic; it was not arrested until after the turn of the century, after strenuous efforts on the part of the Colonial Government to improve sanitation, hygiene and medical services.

In 1918, indeed, the world-wide epidemic of Spanish influenza struck down some 7,000 Fijians out of a population of roughly 90,000; and had effective medical services not then been available, this might well have resulted in a disaster comparable with the epidemic of 1875. Since then, however, the Fijian population has steadily increased, and today it approaches the position which it held at cession.

Fate dealt a cruel blow when it launched measles upon the young Colony, then only three months old. The country had just emerged from political turmoil bordering upon anarchy; it was heavily in debt, trade was stagnant and agricultural industry disorganised, and a rigid economy was imposed. A skeleton staff of

officials, provisionally appointed with limited powers until Her Majesty's pleasure for the administration of the new Colony should be known, was toiling to bring order out of the chaos resulting from the collapse of the former Government. The first resident Governor, Sir Arthur Gordon, had been appointed, but he and his staff had not yet left England.

The new Colony was thus caught unprepared. There were no quarantine regulations, no medical inspections of ships' crews on arrival. There never had been. Since European discovery Fiji had stood wide open to the entry of disease, ships coming and going as their captains thought fit. In three years the Cakobau Government had done nothing to remedy this situation; the Provisional Government had not had time in which to make good the deficiency.

In Levuka, when an overseas vessel neared the harbour, people would put off in private boats and climb on board as soon as the anchor was down, in order to get the latest news. The habit had become a custom of the port. And when, late in February, 1875, the Quarantine Regulations of New South Wales were proclaimed in a belated effort to prevent new infection and to check the spread of the growing epidemic, people persisted in boarding arriving vessels until warned and prevented by the authorities.

These conditions constituted a grave danger. There had been epidemics of introduced disease in many parts of the Pacific. As late as 1860 an epidemic of measles had swept through New Caledonia, the Loyalties and the New Hebrides, carrying off from a fifth to a third of the native population. In Fiji, epidemics of one kind or another had regularly followed the visits of the early Europeans, though their effects were probably mitigated to some extent by the restricted intercourse between the Fijian kingdoms of the period, whose most frequent contacts were in war. But those conditions had now changed. Even the hitherto untamed hill tribes were being christianized and brought into peaceful contact with the coast people.

Few people in Fiji seem to have realised the danger, and until the Deed of Cession was signed nothing was done to provide against it. Then, four days after British Administration had taken over, Dr. John Cruickshank (R.N. Retired) was provisionally appointed Chief Medical Officer of the Colony; but when the measles arrived he had been in that post for less than three months, and he was still without trained staff or legislative support, and without facilities for imposing or enforcing quarantine.

The first few weeks of 1875 saw a most unfortunate conjunction of circumstances. These concerned a number of apparently unrelated events:

- (i) an outbreak of measles of a peculiarly virulent kind in Eastern Australia;
- (ii) the return to Fiji of the ex-King Cakobau and his two sons after a visit to Sydney as the guests of Sir Hercules Robinson, Governor of New South Wales;
- (iii) the welcome accorded to the returning chiefs;

- (iv) a gathering at Navuso of the principal chiefs and people of the hill tribes of Viti Levu; and
- (v) a hurricane, followed by a long spell of atrocious weather.

Immediately after the cession celebrations were ended Ratu Cakobau and two of his sons, Timoci and Josefa, paid their promised visit to Sydney, where they were fêted and entertained by the Governor and his officials. There they encountered the beginnings of an epidemic of measles which, though little regarded at the time, was later to sweep through the eastern states of Australia. Cakobau himself took the measles while in Sydney; but being properly cared for he recovered, and returned to Fiji "looking anything but well after his trip." The young chiefs went down with measles during the voyage home in H.M.S. Dido (Captain Chapman).

That voyage was unusually protracted, taking twenty-three days, partly because of the heavy weather late in December, but mainly because a call was made at Norfolk Island, where the ship put down passengers and stayed five days. H.M.S. Sandfly, calling at Norfolk later, reported that following Dido's visit all on the island had been laid up with measles.

Dido arrived at Levuka Harbour at 5 o'clock in the afternoon of 12th January. She flew no yellow flag of warning; and she was immediately boarded by a shore boat carrying the laundryman or butcher. The Government boat, carrying E. L. Layard (the Administrator), J. B. Thurston (the Colonial Secretary) and Layard Junior, stood off until the accommodation ladder had been lowered, then drew alongside.

The party was met by Captain Chapman, who informed Layard that the ship's doctor had something to tell him. All walked aft to the cabin, where the old King sat, still weak after his illness; and there were handshakings and congratulations.

At this stage Dr. Goodman, the ship's doctor, told the Administrator that all the Fijians on board had had the measles, and the young chiefs another disease—less to their credit—as well. It was alleged later that no word of warning was given, and no suggestion of danger or of isolation. Layard asked if the young chiefs could be kept on board until a place had been prepared for them, and was informed that this was not possible. The doctor added, "They have been some days convalescent." The conversation then drifted to more general topics.

Meanwhile the Fijian crew of the Government boat had been allowed on board and had fraternized with the infected Fijians; shore boats and their occupants had been allowed free access to the ship; Dido's boats were pulling on shore. In about ten minutes Cakobau and all the Fijians, passengers and visitors together, left for the shore before the Administrator so much as realised that they were going.

Cakobau went, on landing, to his own house at Draiba, a mile or so south of the town. Here he was met and welcomed by Ratu Savenaca (his brother), Ratu Epeli (his eldest son), Adi Litia

Samanunu (his wife), and numbers of his people, among them some of the highest chiefs. A day or two later he moved to Bau, where for another two weeks he lay weak and convalescent, daily receiving visits from parties of people attending functions connected with his return. There were festivities for the entertainment of the visitors, with meke and presentations of food and gifts, all present mixing freely. In due course these visitors returned to their homes, many of them to distant parts of the islands, unwittingly spreading the seeds of infection far and wide.

At this stage another untoward circumstance came into operation. A meeting of the chiefs of the hill tribes of Viti Levu had been arranged by Mr. Carew, Commissioner for the Interior, in order that they might meet the Administrator and his high officials and learn from them what the cession meant. The place appointed for this meeting was Navuso, on the Rewa River; the date, 10th January. On 7th January, however, a severe hurricane occurred, raging for eighteen hours and affecting all of southeastern Viti Levu. Rivers and tracks became impassable, and the Navuso meeting was postponed.

In the event, the official party left Levuka for Navuso on 21st January; and Dido having arrived during the period of post-ponement, the party included Captain Chapman and a group of ratings from the warship, who mixed freely with the hill people and at night fired rockets for their entertainment. It is estimated that some five hundred chiefs and people were present; and these, scattering after the meeting to their homes in the hills, carried the infection with them.

To make matters worse, five of the principal chiefs accompanied the official party back to Levuka in order to see the warship and the wonders of sea and town. On 26th January they were shown over *Dido*, and were duly impressed by observing gun practice by the crew. All were ill within a short time of their return to the hills.

Thus, from the outset, circumstances conspired to spread the infection; but for some weeks there were no apparent grounds for anxiety. No one realised the danger that threatened a people now exposed for the first time to a disease which, however lightly regarded in older countries, had already wreaked havoc in some Pacific islands. No one seems to have known of, or remembered, the tragedy that followed the introduction of measles to the New Caledonian area fifteen years before. The officials were apparently more concerned about the other disease that the young chiefs had contracted in Sydney. No one realised that Dido's crew were themselves carriers, leaving infection wherever the ship touched. No one realised that the crowds who gathered to welcome the returning chiefs, and the large concourse of people from the hill districts who met at Navuso, held such tragic possibilities for the spread of the disease. It may well be true that, but for the untimely hurricane, the hill people might have escaped early infection; but it is by no means certain that the ultimate results would have been different from what they were.

Dido was not the only primary source of infection. The

A.U.S.N. steamer Wentworth (1,000 tons) left Sydney on 13th January, carrying passengers and cargo; and coming via New Caledonia, she arrived on 25th January. Two days later the Fiji Times reported that there had been two deaths on the voyage, from measles, and with belated prescience expressed the hope that the disease would not visit Fiji "as among natives it would spread rapidly." The vessel Western Star left Sydney for Fiji on 2nd January, carrying passengers and general cargo, and arrived at Levuka in February with measles on board.

On 28th January, *Dido* left Levuka for the Macuata coast, taking Layard and Thurston to enquire into reported unrest. She returned to Levuka on 3rd February, bringing the chief Ritova and two of his sons; and three days later she sailed with New Hebridean labourers long overdue for repatriation. The warship's crew spread the measles at Macuata; Ritova died of it at Levuka soon after his arrival; the returning labourers carried it to Malicolo Island in the New Hebrides.

Having, as it were, smouldered for weeks, the measles suddenly burst into fierce flame and raced like wildfire, as if a match should be put to dry and wind-blown grasslands. On 12th February the Administrator reported to Sir Hercules Robinson that an outbreak of measles had occurred; two weeks later he reported that it was spreading alarmingly. People in Levuka and adjacent villages were going down with it in great numbers; by mid-February news was received of outbreaks in the Rewa and Kadavu districts; within a month disastrous news was coming in from all quarters.

On 25th February the Quarantine Laws of New South Wales were proclaimed, and it was announced that they would be strictly enforced. Captain Hedstrom, the Harbour Master at Levuka, thereafter boarded all vessels as they neared the reef to make the entrance to the harbour, and people were forbidden to board vessels in private boats until a clean bill of health had been given. But it was now too late for preventive measures. The damage had already been done and was far beyond repair. Cases of measles had been landed from several ships; and now that restrictions were belatedly imposed, overseas shipping had become so disorganised by epidemics both at Levuka and at Sydney, where the waterfront had been practically paralysed by measles, that for nearly three months there was no communication with the Australian Colonies, and as far as overseas vessels were concerned the matter of quarantine scarcely arose. As for internal quarantine, Thurston wrote, "People talk of isolation. They might as well talk of setting a barricade against the east wind."

The authorities at Levuka had, however, a clear duty with respect to other territories in the South-west Pacific; and under the powers conferred upon him by the new Regulations, the Administrator cancelled arrangements for repatriating 150 time-expired labourers by the ship *Loelia*, and refused to allow a vessel to clear for Samoa.

FIJI'S DARKEST HOUR

9

In this emergency the contribution of the *Fiji Times* was a series of bitter attacks on the Administration, and especially upon Mr. J. B. Thurston, the Colonial Secretary, whom the paper never failed to vilify. On 17th February it declared: "The first advantage derived from annexation is the introduction of measles, and for this we are indebted to the *Dido*, which came and discharged her diseased passengers utterly regardless of any consequences that might arise." That comment might have contained an element of just criticism: what followed was plain libel; but there was no Libel Law in Fiji.

The leading article of 24th February, when the extent of the disaster was becoming known, included the following passage:

"Unless, then, the careful fostering of measles, their impartial distribution throughout the islands of the group, is a part of the new native policy of Mr. Thurston, . . . we fail to recognize the causes, either immediate or distant, that have weighed in the great brain of the Colonial Secretary, and caused him, like Voltaire, to ignore 'until too late all dictates of Christianity and all recognition of a superior Being'."

The article went on to suggest a method of dealing with the corpses of victims by deep burial or the use of quick lime, and continued:

"The greatest fear we entertain is for the outlying islands, where medical aid and comforts are not available; besides, it is well known to all that in some of the Fijian towns a great accumulation of filth exists."

The editor suggested a clean-up but failed to suggest how that might be accomplished while the majority of the people were down with the measles and beyond reach of help.

The Administration, for its part, was making "every effort that ingenuity could devise or skill prescribe" to arrest the progress of the epidemic. Dr. Cruickshank, the recently appointed Chief Medical Officer, is not mentioned in reports of the Dido's arrival, whether because he was absent from Levuka at the time or because he was not consulted until too late. But from the time of the first outbreak of measles in Levuka he was assiduous and unsparing in his work. Even the Fiji Times was moved to praise the work which he and other officials were doing:

"Whilst the Press cannot censure too heavily the action of the Government in introducing the epidemic, it is but just to speak in terms of the highest praise of their officials. Dr. Cruickshank is indefatigable in his exertions, and night and day he is among his patients . . . The Police, likewise, display a good spirit in bringing all cases immediately under medical notice." (6th March, 1875.)

Dr. Harwood, a Levuka practitioner, was early engaged to assist the Chief Medical Officer, and was placed in charge of the north end of the town. The public buildings at Nasova were converted into a hospital, open to all Fijians; the Police offices, lock-up and barracks at Totogo, and the Wesleyan chapel at Levuka, were used for the same purpose.

Simple instructions were printed in the Fijian language early in February, and distributed widely. The following is a free translation:

THE NECESSARY TREATMENT OF MEASLES

- It is forbidden for those infected to bathe, or to sit in a cool breezy place.
- Lie down in the house. If you have to leave the house (to go to the latrine) go covered with a blanket and hasten back.
- It is good to perspire freely in the house.

 This is not a disease to cause fear or terror. It does not
- usually cause death if precautions are taken.
- But if a patient goes outside to cool off, or goes to bathe, and catches a chill, he dies.

(Fiji Times, 24th February, 1875)

The Fiji Times also published (13th March) a cutting from a colonial paper entitled "Useful Hints on Measles," describing the symptoms of the disease (3 days in and 4 days out) with simple and homely treatment.

Once the initial period of incubation was past the spread of the disease was alarmingly rapid, one canoe carrying apparently healthy people being sufficient to cause a jump across a wide space of open sea; and it reached the furthermost islands.

Strong winds and heavy rains added to the horrors of the epidemic. Not since 1871 had weather approaching this been experienced. When warm sunny days and mild nights might have mitigated the effects of the measles, the weather was more than usually unfavourable. For six weeks to the end of March the rains continued, 24 inches being recorded at Levuka in four days during the first week of March, and 27 wet days with a total fall of 50 inches for the month at Bua. A few fine days early in April raised hopes of better things; but the rains began again, and continued off and on until May, when the epidemic had almost run its course.

How many deaths this unfortunate spell of weather caused it is impossible to say. How should these simple folk know that to chill this new-felt fever was death? To cool their fevered bodies they threw off coverings, sat in the breeze and bathed in streams or sea. They suffered quick relapse, with congestion of the lungs, and died.

At first proper burial of the dead was attempted; it soon became impossible, bodies being flung into common graves or given shallow burial under the floors of houses or in the precincts of the village. Inspection of the Levuka burial ground revealed bodies buried at depths of from 11½ to 15 inches instead of the regulation six feet; though it was reported that in this respect conditions were better in outlying districts.

Unburied bodies, lack of sanitation and poor food brought about such a condition that most of those who recovered from the measles, and many who escaped it, took dysentery; and it is quite certain that this disease and pneumonia caused many more deaths than the measles.

Among the Fijians fright and bewilderment soon gave place to panic and despair, with a strong disposition to believe that the pestilence had been purposely introduced. Maddened by fear, many thought that the whites, having now become possessed of the country, wanted to be rid of them. Some even believed that Cakobau had been taken to Sydney for the purpose of communicating to him the fatal poison.

In Levuka and other places where skilled attention was available, few Fijians would willingly enter the hospitals or submit to treatment, and few would follow instructions. Many appeared to believe that their only chance of recovery lay in their not being forced to take European medicine; and they offered a dogged resistance to treatment. Those who were induced to enter hospitals, or who were carried there, had to be placed under guard to protect them against their own ignorance and suspicion. Under cover of night they would steal past their guards, and enter houses to mix with friends while the disease was upon them; or they would go and bathe in the sea or lie down in a cold running stream in order to allay their fever. Having thus done themselves irreparable harm, they would creep back to hospital—to die.

On the other hand the imported labourers—wild men from the Solomons or the New Hebrides, or more docile folk from the Line Islands—were willing to take any medicine or nourishment that their white employers gave them, and most of them recovered.

The hill tribes reacted in characteristic manner. Having recently renounced heathenism and received Christian teachers, they ascribed the pestilence to the anger of their former gods, and their faith in the new religion was shaken. Some made fruitless appeals to the old gods; most relapsed into heathenism, either dismissing their teachers or endeavouring to persuade them to change their religion and stay. They shared the wide-spread belief that the pestilence was caused by poison and treachery, for those who had attended the Navuso meeting were among the first victims; and not unnaturally, the tribes determined to again seclude themselves in their mountain fastnesses.

Conditions in the villages were distressing. At Lomaloma, Emberson reported, whole families were carried off; and but for the incessant beat of the death drum one might fancy the village deserted. In general, those who were left in the villages sat, stricken with fear and without hope, either too ill or too dispirited to attend to the sick, and with a dull fatalism awaiting the end.

Parents lay ill and dying while their neglected children starved. Depending upon native remedies, and eating only crude or ill-cooked food or none at all, the sick became weaker and more offensive to their fellows until they were left to starve and die.

Alex. Barrack of Savusavu reported: "The whites have done all they could, and in most cases get them over the measles; but a malignant type of dysentery follows, and they get unmanageable in most cases, and the result is death. They likewise seem quite indifferent about one another, and unless some white person is near, neglect the sick, and sit and look at them dying for want of a drink or a bit of food."

Rev. J. Waterhouse of Navuloa wrote: "The people have been seized with fear and have abandoned their sick. Whole families have been taken ill and have been left without help." He goes on to describe a visit to a sick teacher. "Entering, I found him apparently dead, his wife and four or five children all ill, lying down to die or recover, and the family completely deserted... I went to another town, but found it quite empty. All had fled but one couple, who asked me in."

Leefe of Ovalau wrote (11th April): "I visited a town of about 150 inhabitants. There was scarcely a house in which there was not one dead or dying; fourteen had already been buried . . . not a soul was to be seen; grass was growing over the paths; there was not one sound person in the place. The chief had been buried the day before."

What intelligent treatment might have done for the Fijians is illustrated by two well attested examples:

At Levuka, Lieut. Olive, Commandant of the Constabulary, had under his command 143 men of all ranks. They were among the first affected. By 1st March, however, Olive was able to report that although nine of the men had died, 117 had been discharged from the hospital and given a month's leave; the remainder were still in the wards, and with two exceptions nearly well again.

At the Wesleyan Mission Training Institution, Navuloa, Rev. J. Waterhouse anticipated the threatened danger. He called his students together and talked to them about measles and its treatment; he prepared a quantity of tapioka starch sufficient for all; he built a convenient outhouse for every dwelling; and when the storm broke he visited every case once or twice a day. He lost only one patient.

But for Fijians living in the country districts, and beyond the reach of missionaries and friendly planters or traders, no intelligent treatment was possible. None of the people had previously been exposed to measles; none had any acquired resistance to it; none had any knowledge of its nature and treatment, and few took any notice of advice from the Government.

Even in Levuka, where so much was being done, conditions became bad. On 13th March the *Fiji Times* asked: "Why throw the bodies into graves instead of burying them decently?"—and

2

the writer went on to complain that, although the native churches had been turned into hospitals, in charge of responsible persons, the Fijians with few exceptions refused to go to these places; or being without mats, they found the churches too cold and went home. Of eight people who remained in hospital, six had died, some of them of sheer starvation, no food that they could eat having been provided.

The shortage of food was not due to mismanagement. Stocks from the stores were soon exhausted; and although the gardens were full of food—yams, dalo, bananas, sweet potatoes—most people lacked the physical strength to dig it up, carry it in, and prepare and cook it. For the same reason the Government had difficulty in obtaining sufficient supplies for its hospitals; and as for sending relief to outlying islands, the ships that might have taken it were without crews and unable to put to sea.

Some observers, indeed, felt that medicine and supplies were of less importance than advice and encouragement; but the Fijians would take neither advice nor encouragement. Least of all would they do anything to help themselves. In numerous cases those who were well took panic and fled to the bush or to distant villages, in a vain attempt to avoid the pestilence; and the sick were too often deserted, left to die or recover. At the first onset of symptoms of the disease, people would lose courage and cower down to die. One worker reported: "Sick men and women would look you fairly in the face and say, 'I am going to die'; and at once settle down to inevitable death." To tell a Fijian that he looked ill was certain destruction to him. Six apparently healthy men visited a plantation on Viti Levu, and accosting a Tongan at work in a field, they were informed that all Fijians employed there were "sa mate" (ill or dead). The Tongan added that they, too, looked sick. Glancing at one another in horror, they retired to a nearby house; and all were said to have died within three days.

There were serious losses among the high chiefs, some being among the earliest to die. Cakobau himself lost a son, a daughter who left five children, and his brother, Ratu Savenaca Naulivou. He also lost his faithful Tongan Peter, besides many personal friends. Ratu Savenaca was one of the ablest and most intelligent of the chiefs. He was the Kingdom's first Minister for Native Affairs, a member of the Executive Council for the Ad Interim Government, a signatory to the Deed of Cession, a man highly regarded by Fijians and Europeans alike. Having fallen ill of the measles he was removed to the home of Mr. J. B. Thurston, where he received every care and attention; nevertheless he died on 22nd February, of dysentery.

Ritova, the high chief of Macuata and another signatory to the Deed of Cession, had been brought to Levuka in H.M.S. Dido, with two of his sons, as a disciplinary measure. He died there within a few weeks, and was thereafter known among his own people as Baleilevuka (He who fell at Levuka).

Tui Levuka was taken to hospital on 10th March; a week later

he was dead. The Tongan chief Ma'afu, on the other hand, recovered. He was infected while on a visit to Levuka, but lay ill at Lomaloma; and like most others he soon lost heart and gave himself up for dead. But good friends were at hand, who insisted upon his submitting to treatment and obeying instructions; he was soon well again, but the illness aged him considerably, his hair turning almost white.

In Nadroga by mid-April scarcely a high chief remained, all but two of the leading men having died. The local planters did everything possible to save Tui Nadroga, a singularly good and able chief; but he died of dysentery. At the same time three others of the highest chiefs of this area quietly passed away.

By 23rd April, no less than five of the chiefs who had signed the Deed of Cession a few months before were dead. It requires some knowledge of the Fijian social structure to appreciate what these losses meant to the Fijian people. The high chiefs were the natural leaders, to whom the people looked for example and guidance. They were believed to possess a mana conferring material and spiritual advantages peculiar to men of their status; and when, one by one, they quietly succumbed, their people lost heart and with apathetic fatalism awaited the end.

In Levuka the crisis occurred early in March, and the harassed officials were complaining that few had come forward to help. In the country districts, where the European settlers were more closely in touch with the Fijians, such help as was possible seems to have been given unstintingly; and at a later stage the Government expressed its thanks to the white settlers—planters, traders and missionaries—who under trying circumstances had exhibited special courage and sense of duty.

News from outside areas reached Levuka people mainly through the bi-weekly newspaper Fiji Times. This paper, antigovernment in policy, carried an occasional leading article blaming the Administration for introducing the pestilence and hurling invective at Thurston, the Colonial Secretary; but it contained little else to suggest the magnitude of the disaster which was sweeping through the country. The editor knew nothing of the modern headline; his reports from outlying districts were inconspicuously tucked away in columns of police court reports and trivialities.

These reports do, however, give some indication of the sequence of events. By early March the disease was spreading rapidly among Europeans as well as among the Fijians. On 11th March many deaths were reported on Koro, where the Fijians were in great fear of the disease, deserting their villages at the first rumour of its approach.

By 17th March news was coming in of havoc among the hill tribes of Viti Levu. Major Harding, who knew the hill districts well but was not at this time in Government service, was assiduous in his efforts to relieve these wild folk, but many were beyond all help.

At Levuka the worst seemed to be over by 24th March, "the streets being no longer traversed by natives carrying coffins." A week later the paper commented that the sick at Nasova were all convalescent, and that "the atmosphere was no longer tainted."

Early in April the Government send Harding to Taveuni and the interior of Viti Levu with medical comforts. On Taveuni the disease had made a fierce onslaught, especially among the labourers on the plantations. On one estate 90 men were down out of 110; on another 30 out of 50; on still another every man out of 70. Fortunately the Europeans on Taveuni seem to have escaped; and with few of their men able to dig and cook food or attend to the sick, they themselves toiled unceasingly to provide warmth and sustenance. On 31st March it was reported that nearly all patients were recovering.

Other areas were not so fortunate. On 7th April there was a report of the abject misery that existed in the Rewa district, where starvation was causing many deaths during the period of convalescence. At Lomaloma the heaviest mortality had been among the Tongans. In Kadavu some parts of the island were almost deserted, the survivors—Fijians and Europeans alike—all having fled elsewhere.

By the third week in April there were signs that in the nearer islands the epidemic was wearing itself out. Fijians were arriving at Levuka with their large canoes full of produce—a sight that had not been seen for many weeks. But harrowing reports were still coming in of the ravages of the disease elsewhere. On Moala about 80 had died, Keteira village suffering 26 deaths in 48 hours. On Totoya and Matuku, however, the sickness had scarcely had time to develop; and as fine weather had at last set in, it was hoped that these islands would be spared the worst.

On Koro between four and five hundred people were reported to have died. In Nadroga deaths from measles had been numerous; but far more had resulted from the dysentery which had followed. At Nakorovou, at the south end of Taveuni, 75 had died out of a population of 300. On the coast of Viti Levu between Namalata and Qoma, a distance of some 20 miles, 180 deaths were reported. In Lau the people of distant Ono were reported to be starving, subsisting upon yaka roots and old nuts; and Ma'afu despatched his yacht Zarifa and the cutter Caroline with food for their relief.

By the end of May the epidemic had died out in most of the islands, and from the available reports the officials were attempting to assess the loss. A Melbourne telegram published in London *Times* (9th June) stated that 50,000 Fijians were believed to have died; happily this estimate was later found to be too high.

The Colonial Secretary, in a memorandum dated 28th June, reported that on Ovalau, 447 had died out of a population of 1,546; on Koro 688 out of 2,543; and at Ba, 2,214 out of 7,925. These figures represent losses of between 27% and 28% of the population. It was believed, however, that losses among the hill tribes had been less severe than among the coast people.

Commodore Goodenough, in a memorandum to the Secretary

of the Admiralty, put the losses at from 25,000 to 30,000. Sir Arthur Gordon's final estimate was "not less than 40,000"; and as this figure was based upon the reports of officials engaged on tours of inspection throughout the islands, and accords well within the ratio of known losses recorded above, it must stand.

Sir Arthur Gordon and his staff had left London for Fiji on 22nd March. They arrived at Sydney late in May, and there they received the first reliable news of the disaster that had overtaken their young Colony. Gordon himself had to await telegrams from London; but he lost no time in organising relief, despatching Drs. Macgregor and Mayo, and three other members of his staff, with medical supplies and stores, in H.M.S. Barracouta on 8th June. The Governor himself followed soon afterwards, reaching Levuka on 25th June.

The two medical officers arrived in time to play a full part in the heavy task of cleaning up. Dr. (later Sir William) Macgregor, young, energetic and capable, had accompanied Gordon from Mauritius to become Chief Medical Officer in Fiji; Dr. Mayo was described as a keen, clever man, a Fellow of New College, Oxford, with wide experience in Europe and Asia, who was coming to Fiji to study Pacific health problems. At Levuka they joined Dr. Cruickshank, who became Assistant C.M.O.; and with other officials, old and new, they quickly organised relief parties. These visited the villages, enforcing their thorough cleansing; mounds of earth were raised upon insufficiently buried bodies; refuse was removed or burnt; the Fijians were given nourishment and medical attention. Sir Arthur himself arrived in time to see that this essential service was done thoroughly.

The effects of the epidemic were far-reaching. The Fijians themselves believed that for three years afterwards a considerable decline in the population occurred; and there is evidence in support of this view. One of them said: "During the first year there were no births; during the second, all who were born died." Physically and psychologically the people had received a shock from which they did not fully recover for years; numerically they are only now regaining their former position, after eighty years.

Among the hill tribes the effects were politically serious. Large sections of the people reverted to heathenism and savage practices. In July, Carew reported that at Nadrau the people were again practising heathen rites, and drumming with bamboos to appease the wrath of their former gods; they were quite willing, however, to allow a teacher travelling with Carew's party to pray with them in their houses. The western tribes were more intransigent, and were becoming increasingly turbulent and disaffected. Within a few months they were attacking the coast people, burning villages and eating the victims. Soon they were in open rebellion, and a campaign of some months' duration was necessary to restore them to a peaceful frame of mind and confidence in the Government.

Inevitably there was inquiry to fix the blame; but it was a thankless and unprofitable task. The Colonial Office felt that Dr. Goodman of H.M.S. Dido should have warned the local authorities that there was danger of the measles spreading; and they drew the attention of the Lords of the Admiralty to his "careless and reprehensible conduct." Thereupon Commodore Goodenough was instructed to make full inquiry. He concluded that "no one treated the matter sufficiently seriously" and "everyone was indisposed to court or to impose restrictions of quarantine." It was admitted that to have made the ex-King and his sons virtual prisoners in strict quarantine at the time of their triumphant return from abroad would have been misunderstood and resented by the Fijians. The Commodore held that most of the responsibility lay on those officials who by long experience in the South Seas "should have been aware of the fatal effect of the first introduction of measles among a population previously unvisited by the disease." Nevertheless, the Earl of Carnavon's summing up laid most blame on the Captain and Doctor of H.M.S. Dido, while it did not entirely absolve the local officials.

But wherever the blame lay, it was the native Fijian people who paid the price.

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