CHAPTER 3

EVENTS AT MORESBY

AT the end of the first week in September 1942 the battle centres were moving closer to Moresby, and there was more medical work to do, partly in the care of the increasing numbers of troops, and partly in preparation for the expected increase in casualties from the Kokoda-Ilolo line. The 3rd Field Ambulance still continued in a static but highly useful role. The commander, Lieut-Colonel Gunning, was returned to Australia medically unfit, and the unit was commanded in the interim by Major R. N. C. Bickford, and later by Lieut-Colonel J. N. Freedman. The work at the infectious diseases hospital at Lux Lane continued, and Brigadier Johnston decided to extend the unit's work to the handling of men who needed additional care at a rest camp before being drafted to the convalescent depot. Opportunity was taken also to arrange for dental attention by the 256th Dental Unit under Captain P. Stephens.

Further hospital accommodation had been needed at Moresby for some time, and there had been a good deal of discussion on the question of the best site. On 23rd August the 2/9th A.G.H., which had been temporarily in South Australia, arrived in Port Moresby. Colonel C. E. Wassell had retired from the command through ill health, and was succeeded by Colonel A. H. Green. Plans had been made *en route* for the correct unloading and transport of stores, and for the setting up of accommodation and essential services. On arrival, Green found that final selection of the site had been made only the day before, when the scrub on the area was burned, leaving a smouldering blackened surface over the undulating contours. The members of the unloading party, without the advantages of an advance section or assistance other than that generously offered by the staff of the 5th C.C.S., dumped their stores as best they could, and were glad to avail themselves of the use of tents of the C.C.S. for quartering and feeding the working parties. The site was intersected by erosions between steep hills, which sometimes formed torrents after heavy rain and flooded the wards. The area was too undulating for the making and use of a simple sketch map, but with the engineers' help some detailed planning began. One reason for the choice of this area was the possibility of extending the piped water supply from the C.C.S.: however, five weeks passed before more than one line was available, and over 600 patients were held before a supply was laid on. Ten days after arrival at the site the hospital was admitting patients at the rate of forty-six per day. These trials were in part at least a reflection of the more urgent stresses being imposed on the medical units in the Moresby area.

During the next three weeks after hospital work had begun 920 patients were admitted; there were 605 beds equipped and 560 occupied. Eighty-four beds were set apart for patients with dysentery, which was still preva-

lent in the Moresby area. On the hospital site itself the sanitation was unsatisfactory for some time. Latrines took six days to build, could not be constructed fast enough to meet the requirements of an expanding hospital, and flies were prevalent. Surgical work was much hampered by the lack of a proper operating theatre; steel prefabricated huts had been promised by Land Headquarters, and had arrived, but were used for other purposes, in spite of protests, and as a result the theatre was completed for work only two months after the arrival of the hospital.

It was soon evident that one 600-bed hospital was insufficient to cope with rising requirements of illness and injury. At the beginning of September Green suggested that the simplest way would be to expand the 2/9th A.G.H., to 1,200 beds, and bring up another 600-bed hospital from Australia, but permission was only given to increase the establishment to 800 beds, on 29th September. It was not until this date that the engineering services were able to start work on the wards, as they hitherto had been engaged in surveys, and planning and work on water reticulation and the operating theatre. At the end of September and beginning of October the unit was warned that the nurses were being sent up. At this time the unit was admitting at the rate of a 1,200-bed hospital, and the commander pointed out that this rate would increase by reason of additional facilities for surgery, growing numbers of troops and the advent of the malarial season. When additional services called for by this expansion were being planned Green succeeded in having the plans framed to allow for a further increase to 1,200 beds. One native-type hut was used experimentally as a surgical ward, and another later for physiotherapy, and work was begun on extra wards. Before even the full expansion to 800 could be achieved, an acute demand for beds compelled the hospital to provide extra bed accommodation by putting ambulance stretchers under beds.

The medical and nursing problems which arose in the 2/9th A.G.H. were greatly accentuated at this period of its work in Moresby by the fact that no members of the A.A.N.S. or A.A.M.W.S. had been permitted to accompany the hospital, because of doubts in the stability of the military position. This threw a great strain on the male orderlies and on the medical officers who had to perform, or at least oversee, many technical procedures that would otherwise be carried out by nurses.

The total hospital beds available in New Guinea amounted to only 5 per cent of the force, which when compared with the 8 per cent of Middle East could not be considered adequate. New Guinea Force had steadily expanded in August and September. Whereas in July there were three infantry brigades, there were now, in late September, nine: the 7th and 18th at Milne Bay and the 14th, 16th, 21st, 25th and 30th Brigades, and the 126th and 128th United States Regiments round Port Moresby or in the Owen Stanleys. It must be realised too that hospital beds available included the beds held and used in field units and convalescent depots. The 3rd and 14th Field Ambulances and the 5th C.C.S. were all largely immobilised and many of their beds subserved the purposes of a hospital.

Their purely medical work was greatly assisted by the attachment to the C.C.S. of a mobile bacteriological laboratory which carried out pathological examinations, particularly for malaria and hookworm. The work of supplying the growing needs of the Infantry Training Battalion and the Infectious Diseases Hospital imposed a continued strain on the 3rd Field Ambulance in addition to its other duties. The 14th Field Ambulance was already committed to the maintenance of the detachment which accompanied the force on its way back from Kokoda, and had also a detachment at Ilolo. As soon as the withdrawal to Ioribaiwa was complete the 2/6th Field Ambulance set up an M.D.S. at Ilolo with staging posts forward. This relieved the 14th Ambulance of some of the work, and this unit was directed on 18th September to establish a dressing station at Lux Lane, and a staging post at Ilolo-Koitaki road junction. The dressing station was designed to take patients from the M.D.S. at Ilolo, and from the 2/4th Ambulance's A.D.S. at Subitana, and also from the aid posts of the 14th Brigade. From this A.D.S. men were transferred to the camp hospital or to the 3rd Ambulance's hospital for infectious diseases.

The 46th Camp Hospital, originally the "base" hospital of Moresby, had also developed in new directions and had two offshoots, for patients approaching or undergoing convalescence. One of these extensions was in buildings at Rouna near the falls on the Laloki River, formerly used as a Red Cross convalescent home, the other occupied the plantation buildings at Koitaki.

The convalescent depot at Koitaki, like most places in the neighbourhood, carried a considerable malarial risk, but it had the advantage of a cooler, airier location than King's Hollow, where the buildings were shut in and hot. On 16th September, the military position on the range had deteriorated and it was decided to withdraw the hospital and convalescent depot at Koitaki to a safer area closer to Moresby. From a restful convalescent home Koitaki became a centre of great activity, and the numbers of sick and wounded passing through increased so that Captains L. S. Davies and B. N. Adsett had to clear the patients as quickly as possible so as not to hold up the stations and posts established at Ilolo and other places near the roadhead. Later when Koitaki became more secure the buildings were again occupied by a medical unit.

When the 113th Convalescent Depot was also able to return to its original site in the base area, Major Thorp expanded his unit considerably, and its work, carried out conveniently close to the Moresby installations and the posts at the Moresby end of the Kokoda Trail was of the greatest value to the increasing Australian forces in New Guinea.

Disposal of Patients. The evacuation of patients to the mainland or even from forward to base areas raised very intricate problems. From the beginning hospital accommodation was not easy to arrange, and it was essential to have enough hospital beds available, not only to secure attention for sick, but also to ensure that men were not sent back to the mainland unless the severity and probable duration of their illness warranted it. Transfer to a distant hospital meant loss of men for an indeter-

minate time. In point of fact they were virtually lost to their units and formations.

The actual method of travel to the mainland was usually by sea, for aircraft were scarce. The United States forces with their greater facilities used air transport more than the Australians. There were several difficulties to be overcome. The planes used were generally transport aircraft making a return journey from Moresby, and only suitable for ambulant sick and those able to look after themselves. Otherwise attendants were needed who had to be returned to Moresby by air or sea, and who could ill be spared from medical units. Later, sheer numbers emphasised the need for a wider employment of both sea and air transport. By sea the ideal method was by hospital ship, but this was not always practicable, nor could the available ships supply enough beds. Sea ambulance transport was very valuable, though the dearth of medical attendants limited the use of these ships for patients ill enough to need personal care. Great help was often given by the United States medical services in the provision of medical officers and orderlies to staff sea transports. The actual transfer of patients to the ships was usually difficult to organise. The expected time of arrival was always somewhat indefinite and was often changed, even several times, and the stay in port of both hospital ships and transports was usually brief.

Medical Boards. Many of the practices found helpful in the Middle East had to be learnt afresh in New Guinea. The first important step was to ensure that the initiating of boarding should be a function of the medical service. The number of boards held was for a time increased by men in the older age groups who were now feeling the strain of service in the Middle East, or elsewhere since their return to Australia, and also by members of militia units whose physical standard was not good and who had not stood up to operational training, to illness or to actual fighting. One passing difficulty was that the militia units in Australia adopted different categories of medical classification to those used by the A.I.F. in the Middle East: eventually the latter became the standard.

Later all medical boarding was done at the 2/9th A.G.H. where the work was carried out promptly and efficiently. Much routine boarding was saved by the encouragement of consultation. At the 2/9th A.G.H. and 5th C.C.S. the opinion of consultants and specialists was obtainable by special arrangement. It was also particularly helpful to the D.D.M.S. to have the opinion of senior physicians and surgeons as to the advisability of returning patients to the mainland.

Dental Work. Lieut-Colonel M. S. Joyner acted as A.D.M.S. Dental for New Guinea Force, and in spite of the difficulties engendered from troops' movements and shortages of supplies contrived to serve the needs of the rear areas. In Moresby and neighbouring areas prosthetic work was carried out in considerable volume, and conservative dentistry likewise. The dental sections were allotted in proportion to the concentration of troops available for dental work, and dental officers on the strength of medical units helped to maintain oral fitness as far as this was possible

with such a quickly moving population. In forward areas only urgent work could be done, but as has always been the case, dental officers collaborated with surgeons in various technical procedures, some not directly related to oral surgery, but nonetheless valuable.

Medical supplies and stores. The limitations of sea transport in Townsville and the dearth of wharf space and dock labour at Moresby caused many delays. Transport by air was also slow and unreliable, owing sometimes to insufficient labelling of packages, or to breakdowns in the method whereby incoming material would be placed in dumps where it might lie unrecognised. This gave Townsville a reputation as a bottle-neck. There were also risks of pillaging, which were believed to be considerable during transit by sea.

The distribution of stores was carried out by the New Guinea District Depot Medical Stores, a unit which arose from the dispensary of the 46th Camp Hospital. After the arrival of the I Australian Corps the 2/4th Advanced Depot Medical Stores, under command of Major F. R. Matyear, a unit with valuable experience gained in the Middle East, absorbed the previous establishment, and settled in at a convenient location near the 2/9th A.G.H. and 5th C.C.S. From here the corps was supplied under conditions of the greatest difficulty, and in addition the base establishments in Moresby, and large quantities of medical material were also sent to Milne Bay. Supplies were promptly packed and despatched whether by ship or by small coastwise craft, by plane or for dropping from the air, or by carrier, and the work of this and similar units during the war in the islands was a vital link in the work of the medical services.

Hygiene. The cause of hygiene in Moresby was handicapped from the first, by reason of the difficulties in educating partly-trained troops, the lack of experienced staff, and the state of transition of the hygiene service. Captain J. L. Groom, commanding the 16th Field Hygiene Section had an uphill task in securing that degree of cooperation with the troops and others comprising the mixed population of Moresby at that time, and when the corps arrived there, the D.D.M.S. described the state of sanitation as deplorable. With this problem was also that of malaria control. Major S. A. McDonnell, the D.A.D.H. Corps, combined with Groom to improve control, and after a town major had been appointed some headway was made. Colonel Blank, the American base surgeon at Moresby, was also thoroughly in agreement with the principles concerned.

The Australian medical officers found that, as in previous campaigns, the real difficulty in such matters was getting down to the individual man, his conscience, his discipline and his performance. By cleaning up dumps and refuse, burning and burying tins of other waste, erecting deep-trench latrines and imposing disciplinary measures on both Australians and Americans, success was gradually gained, evidenced by a striking fall in the incidence of dysentery. McDonnell was further handicapped by not having the 2/2nd Field Hygiene Section; this unit was on the mainland in process of being disbanded in accordance with the new hygiene system which was being introduced into the army. In the middle of September

the problem of dysentery prophylaxis was made more important by the withdrawal of the Australian troops to Ioribaiwa and Imita Ridge.

An increasing body of troops was now concentrating within a short distance of Moresby, under conditions not likely to foster hygiene, and pressing down the Kokoda track towards Moresby was a powerful Japanese force, which would certainly bring with it a trail of dysenteric infection. There was too a real risk of the introduction of the potentially serious Shiga type of dysentery, which would increase the wastage of men already feeling the strain of the arduous campaign. This was an additional reason for active preventive measures; it has already been pointed out how important it was to keep Moresby as a military base free of communicable disease.

In the beginning of October when elements of the 6th Division began to arrive in Moresby the A.D.M.S., Colonel H. M. Fisher, made severe comments on the general hygiene of the area, and reported to the divisional commander that disciplinary action would be necessary to cope with carelessness in disposal of tins and food residues, and with slackness in dress. The personal support of the G.O.C. Corps, Lieut-General Herring, was of great help in establishing higher standards.

Malaria prevention was hampered by lack of material. This was a serious matter in Milne Bay, and in Moresby also there were grave shortages. For example, fair supplies of malariol were to hand, but there were not enough sprayers. Ford, McDonnell and Groom had succeeded in carrying out malarial surveys, and the dangerous areas were known where mosquito breeding was intense, and where the native splenic index was high. They also gave much advice and instruction on specific problems, and travelled round the area. In this way much laxity was disclosed and strict measures were taken to enforce orders.

Water. The Laloki River supplied the Moresby area, and apparently this water communicated no infection to the great number of men who drank it unsterilised, in spite of its opportunities for contamination. The impetuous rush of the Laloki from its upper rocky levels might, it was suggested by optimists, supply enough aeration to purify the water, but experience of other sparkling streams was not always so favourable, as apparently clean water would sometimes contain organisms of the *coli* group. The plan thought desirable was chlorination at the pumping station at Bomana, but the chlorination of water by individual units was practical and reliable provided the material was obtainable. Away from base areas, and in particular on the Owen Stanley Range water must often have been contaminated. Here the only practicable method was the use of individual sterilising outfits, but these were not always on issue.

Combined Operational Service Command. This organisation was established at an opportune time, and its medical section, with Lieut-Colonel R. H. Macdonald as A.D.M.S., was able to take over more and more details of administration in the base and line of communication areas, thus freeing the D.D.M.S. for work on wider aspects of policy and forward planning. The arrangements for sea transport of sick and wounded were

early taken over by C.O.S.C., and later the land transport to the ships, and control of the general and camp hospitals was overseen by this organisation. This had the advantage of coordinating Australian and American hospital arrangements.

AUSTRALIAN NEW GUINEA ADMINISTRATIVE UNIT (ANGAU)

The prompt formation of this unit was a most important step. It was not only necessary that the organisation of the natives should be designed to help the cause of expelling the invader from New Guinea, but also that their well-being should be constantly considered for the sake of the present and the future. The medical objects of the unit were to maintain the health of the native population, and to place the health policy on a firm basis of preventive medicine. A health directorate was formed comprising a medical service with sections concerned with nutrition, malaria control and hygiene. Native field hospitals were run by European medical assistants, with the help of native orderlies with variable degrees of training, and efforts were made to increase the knowledge and capacity of these men. Many of the medical assistants, though unqualified medically, had attained a high degree of practical skill, and had the advantage of special training in Australia. In operational areas hospitals were established to serve task forces which operated throughout the Territories.

The more seriously ill patients were transferred to base areas, but immediate treatment was given as far as possible to the natives employed by the army as carriers or in other operational duties, and also to natives in the villages. Central hospitals in each region undertook the treatment of diseases causing a significant morbidity, such as tropical ulcers and yaws. These services were supplemented by missions which maintained hospitals and treatment centres; some of these employed qualified medical practitioners and nurses. Further mention will be made from time to time of the medical work of Angau. In the present instance the outstanding operational contribution of Angau was the undertaking and maintenance of the native carriers on the Owen Stanley Range, who formed the life-line of supplies and medical evacuation, and who needed the guidance and help of those who understood them. The first senior medical officer appointed to the administration was Captain N. V. McKenna, who had had experience in New Guinea before the war. Close liaison between the D.D.M.S. of New Guinea Force and Angau was maintained, but it was soon apparent that the S.M.O. alone could not carry the great responsibility of being the only qualified medical officer, and that the medical section of Angau would have to expand.

OTHER FIELD UNITS ARRIVE IN MORESBY

On 2nd October the 2/2nd Casualty Clearing Station, commanded by Lieut-Colonel J. H. Stubbe, arrived in Moresby, and set about establishing the unit at Koitaki. The plantation buildings there had been used previously as a sort of annexe to the 46th Camp Hospital, and it will be

recalled that this establishment had been disbanded when the enemy approached too close for security. Now the opportunity was seized to increase the accommodation and resources at Koitaki by putting Stubbe's unit there. The plantation buildings were supplemented by tents, and on the 6th the first patient was admitted, after which the numbers mounted rapidly. As we shall presently see the military position had now changed. Fresh troops had come in, tired men including some of the medical units were relieved, and the greater stability of the Moresby area gave a good background for a large and important medical base.

The 2/1st Field Ambulance, commanded by Lieut-Colonel D. A. Cameron, accompanied the 16th Brigade when this element of the 6th Division arrived, and at first was engaged in training, with particular reference to methods and extemporisations used in the war on the ranges. Small sections were equipped for the formation of small medical posts, with certain additions to the usual items, such as sulphaguanidine and pentothal. A little later an M.D.S. was opened to serve the 14th Brigade, and an A.D.S. on the river bank near Bomana airfield. Later again this unit was able to play a useful part in a hospital role, chiefly in the handling of men with malaria.

The 113th Convalescent Depot, after a rather uncomfortable period at the Murray Barracks, was allowed to return to its previous location in the Sogeri Valley as from 7th October, and there resumed its usual work.

UNITED STATES PARTICIPATION

General MacArthur directed that an initial force of one regiment would advance over the mountains to strike the Japanese force on the Kokoda Trail in the rear. Accordingly, early in September, after discussion with General Rowell, Brigadier-General Hanford MacNider sent a small advance reconnaissance party by an alternative route from Rigo, some forty miles south-east of Port Moresby, on to the southern slopes of the Owen Stanley Range. A few weeks later a detachment of the 126th Regiment followed, and a week later the rest of the battalion.

The main body arrived at Jaure on 22nd October without making contact with the Japanese, but the track was so arduous that the remainder of the regiment was not sent forward. At Jaure the force split, and turning to the north, one detachment crossed the divide and continued along the Kumusi River to Wairopi and thence towards the coast. Another party made a detour over the Girua River and finally reached Popondetta. The bulk of the battalion struck eastward to link with an American drive from south of Buna; the rest of the Americans participating were flown across the mountains, and their further activities were in relation to the operations on the plains east of the range.