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ANNALS OF THE
UNIVERSITY OF OTAGO MEDICAL SCHOOL



OTAGO UNIVERSITY GATEWAY

From a sketch by the Author.

ANNALS
OF THE
UNIVERSITY OF OTAGO
MEDICAL SCHOOL

1875-1939

by
D. W. CARMALT JONES

PROFESSOR EMERITUS
OF SYSTEMATIC MEDICINE IN THE UNIVERSITY

NEW ZEALAND
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To

SIR HENRY LINDO FERGUSON, Kt., C.M.G.

M.A., M.D. (DUBLIN), HON. M.D. (MELBOURNE),
F.R.C.S.I., F.R.A.C.S., HON. F.A.C.S.,

PROFESSOR EMERITUS OF OPHTHALMOLOGY
AND SOMETIME DEAN OF THE MEDICAL SCHOOL,
UNIVERSITY OF OTAGO

CONSULTING OPHTHALMIC SURGEON,
DUNEDIN HOSPITAL

THESE ANNALS,

WHICH ARE PUBLISHED BY MEANS OF A GRANT FROM

THE FERGUSON FUND

ARE INSCRIBED BY THE WRITER.

PREFACE

AFTER retiring from a Chair in the University of Otago in 1940 I was asked to write this book. My first intention was to have it published in England, and for reasons stated on the first page I thought it would be wise to give a brief account of the nature of the country of New Zealand and of its history. This having been written, one of my former colleagues suggested that it should be augmented by a note on the zoological and botanical peculiarities found there, and this has been done.

As the writing progressed I realized that the book would have very small appeal outside New Zealand, and that it would be wiser for it to be published there; this made the opening chapters rather superfluous. I have, however, retained them, because in fact the establishment, development, and present status of the Medical School are due to the geographical nature of the country, which is what has also determined its history.

My thanks are due the Chancellor of the University, Mr. W. J. Morrell, for permission to use the University records, and to the Dean of the Medical School for the use of those of his Faculty.

My thanks are also due to the University Council for permitting the costs of publication to be defrayed from the Ferguson Fund.

The book was read in typescript by Sir Lindo Ferguson, Sir Louis Barnett, Professor Hercus, Dr. Frank Fitchett, and Dr. W. J. Mullin, to all of whom I am grateful for a number of corrections and suggestions.

I have also had much help on particular points from Mr. H. Chapman, Registrar of the University, the late Dr. James Fitzgerald, Dr. Siedeberg-McKinnon, Mr. Alfred Eccles, Dr. A. H. McLintock, Miss Marion Fyfe, of the Biology Department, and Dr. F. J. Turner, of the Mining School, to all of whom I wish to record my thanks. Dr. McLintock very kindly revised the proofs.

I have to thank the Chairman of the Editorial Committee of the *Australian and New Zealand Journal of Surgery* for permission to reprint Sir Louis Barnett's article, which forms Appendix I.

D. W. CARMALT JONES.

Dunedin, N.Z.,
May, 1945.

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CHAPTER I
OF NEW ZEALAND

IN the pavement of Water Street, Dunedin, New Zealand, is embedded a tablet with this inscription:

ON THIS SPOT
THE
PIONEER SETTLERS
LANDED FROM A BOAT OFF THE
JOHN WICKLIFFE
ON THE
23RD DAY OF MARCH, 1848,
TO FOUND
THIS CITY AND PROVINCE

together with the names of five ships: *John Wickliffe*, *Philip Laing*, *Blundell*, *Bernicia*, and *Victory*.

In 1869, the centenary of the landing of Captain Cook in New Zealand, these pioneers celebrated their twenty-first birthday by the decision to establish the University of Otago, which was to include a Medical School. The project was undoubtedly an ambitious one.

The present writer, on appointment to a Chair in this University, found difficulty in obtaining in London even tolerably accurate information about New Zealand; very little is known about the country by English people; it may be wise therefore to state the elementary facts about its general character and its history. In support of this goes the experience of an Otago professor who was elected from Oxford and who was duly dined by his college common-room in congratulation. On this occasion the very distinguished Head of his famous college remarked: "So, Dr. So-and-so, you are going to New Zealand; how interesting! You will be able to run over to Australia for the week-end!" In those days it took nearly a week's travel to reach Australia from New Zealand.

New Zealand lies in the Pacific Ocean some 1,200 miles to the south-east of Australia. It consists of two principal islands, North and South, separated by Cook Strait, which is about twenty miles across at its narrowest point. The total area is about 100,000 square miles, which is more than Great Britain, less than Great Britain and

Ireland. The North Island is contained within a right-angled triangle, of which the hypotenuse is 460 miles long and lies slightly N.W.-S.E. of the 174th meridian of longitude E. of Greenwich. The N.E. side of the triangle is 360 and the S.E. side 280 miles long; each side of the island is much indented. The South Island lies within a parallelogram, which is 400 miles long and 150 miles wide, the island's smallest diameter is just under 100 miles. Its general direction is N.E.-S.W., and it lies S.W. from the southern extremity of the North Island. The latitude of New Zealand in the Southern Hemisphere, 34° - 47° S., corresponds very closely with that of Italy in the Northern, 38° - 46° N.; and in longitude it is nearly the antipodes of the west coast of Spain and Portugal. If the map of New Zealand is turned upside down a curious resemblance can be seen between its outline and that of Italy.

To geologists the country presents a long and complex history through the Palaeozoic and Mesozoic periods, when much mountain building and folding occurred. These mountains had been eroded to a peneplain by the Middle Cretaceous period; this peneplain sank and was flooded by marine waters with sedimentation. It emerged again in the Mid-tertiary period, and was again eroded to a nearly peneplain condition. In the Pliocene there was emergence of the whole area, with erosion of the Tertiary deposits down to the Cretaceous peneplain surface in the high country. It was also much affected by the Pleistocene glaciation.

New Zealand has been described as a "concourse of earth blocks, highest on the N.W.-S.E. axis of the mass, much warped, faulted, and folded." The Pliocene uplift left a steep slope to the north-west, where there are gold-bearing gravels, and a gradual slope to the south-east, along which are troughs excavated by glaciers, which have become aggraded valley plains; the fans of these are now confluent and form outwash gravel plains.

The great range of the Southern Alps runs parallel with and close to the West Coast of the South Island, and there is a similar range in the North Island, which continues the same line. In the centre of the North Island is a volcanic plateau with still active volcanoes, geysers, and hot springs. There is a great variety of soils, which are divided into (1) older sediments and crystalline rocks; (2) younger sediments containing coal-measures, these being moderately fertile; (3) basic lavas, which are highly fertile; (4) siliceous lavas, which are relatively infertile; and (5) sand, gravel, and silt.

At the present time New Zealand exports are nearly all pastoral—wool, meat, butter, and cheese. Only three-quarters of the wheat consumed is home-grown. Out of forty-four million occupied acres thirty-six millions are pasture, six millions in dairy farms, and two millions in agriculture. There are extensive forests, but the imports of timber are twice as great as the exports. One-sixth of the total area is uninhabitable.

The following note on the native flora is abstracted from "Plants of New Zealand," by R. M. Laing and E. W. Blackwell.

New Zealand is now and has long been the most isolated land-mass of its size in the world, but in the remote past it had connection with the Antarctic Continent and also to the north with New Guinea.

Its isolation is demonstrated by its flora; two-thirds of the indigenous flowering plants are not found elsewhere. Also the great variations within New Zealand in climate, altitude, and rainfall in different parts have produced corresponding variations in the plant families.

Beech, manuka, tussock, and bracken are widely distributed throughout the country; tussock, toi-toi (like pampas grass) and cabbage tree (lily palm) are on all the plains, and fern is found everywhere, especially in the North Island; no country outside the Tropics has so many different kinds of ferns.

The bush, that is, the forest, is highly varied and contains as many different kinds of trees as does half Europe; most of them are derived from either Malaya or Melanesia.

New Zealand forest is sombre, most of the trees are evergreen and very few deciduous, consequently there is none of the bright colouring of the European spring and autumn. Most of the flowers are inconspicuous, and when noticeable are generally white; striking exceptions are the brilliant reds of the rata and pohutukawa. Certain trees—the nikau palm, the cabbage tree, and the different tree-ferns—make an impression on the landscape which is strongly suggestive of the Tropics. New Zealand bush is very permanent, and after being cut out it rapidly re-establishes itself if left alone. Most of the forests are mixed, and show a great variety of trees, but in some districts particular species predominate; thus there are or have been whole forests of beech, kauri, totara, rimu, and kahikatea.

The dense forests of evergreen are very little penetrated by sunlight, consequently the small plants which survive are those which have developed the "climbing habit," and the forest trees are thickly covered with climbers. Lianes are better represented there than in any country outside the Tropics except Chile. The most evident are the clematis, passiflora, and lawyer, which climb by tendrils, and the supplejack and mühlenbeckia, which twine. The rata strangles its support.

The scrub, or undergrowth, is most impenetrable, its leaves are small and sparse, its branches twiggy and often pointed. It consists chiefly of Coprosmas.

Above 1,000 feet the forests are of beech, these end at about 3,000 feet, and the sub-alpine shrubs, mostly veronicas and compositæ, are then found. Above these are the alpine herbs. These are naturally most plentiful in the extensive mountain districts of the south. All vegetation ends at the permanent snowline, about 7,000 feet. Among the most striking alpine flowers are the *Ranunculus Lyalli*, with its large white cups, and the *Celmisia*, the mountain daisy.

This note on native fauna is abridged from "Animals of New Zealand," by F. W. Hutton, F.R.S., and James Drummond.

These authors regard the fauna as "the remnant of a population that existed long before mammals overspread the earth," with additions, chiefly from Australia. Striking contrasts are found; for instance, numbers of the birds cannot fly, do not sing, and are of dark plumage, but among the migrants are some which come from New Caledonia, a distance of a thousand miles, "the boldest flight on record." And the songs of the tuis and the bellbirds are of extraordinary beauty.

In the Cretaceous period the land in these waters was limited to a few islands. In the Tertiary the land was elevated, and its area included the present New Caledonia, Fiji, and New Guinea. Birds, which had been recently evolved in the Northern Hemisphere, penetrated to New Zealand, among them the kiwi, crow, thrush, starling, robin, wren, parrot, rail, duck, and penguin. They were of Australian, Melanesian, European, Antarctic, and South American origins. The islands were again isolated by a general sinking at the end of the Eocene.

Other birds came: quail, hawk, duck, heron, and some shags from the north; gull, tern, albatross, and other shags from the south. Migrants still come, the long-tailed cuckoo among land-birds, and plover, curlew, sandpiper, and godwit among shore-birds, the last coming all the way from Siberia. Apparently the land-birds follow the old land lines in their migrations, and the shore-birds the old shore lines.

The New Zealand birds are very numerous, and many are peculiar to the country. Before the coming of man they had plenty of food and no enemies, and, having no need for it, a number of them first neglected and then lost the power of flight. The modifications were towards loss of flight and towards melanism in colour.

Of forty-five species of birds thirty-eight are endemic; of thirty-one genera nineteen are found nowhere else; of twenty families two are peculiar to New Zealand. This country is the headquarters of the penguins, all genera but one are found there.

The only mammals are two bats, one of which is peculiar to the country. A dog and a rat were imported by the Maoris.

The only amphibian is a frog.

Of reptiles there are lizards of only fifteen species, and the tuatara, which is not a true lizard, but allied to the crocodiles. This is of one of the oldest reptilian types, and has affinities with the turtles and the lizards. In Cretaceous times an aquatic form existed in North America and in Europe. The New Zealand tuatara, the only survivor and now very rare and closely preserved, has the general appearance of a lizard; it is about twenty inches long, yellowish-brown in colour, with yellow spots. It has a well-developed breast-bone and abdominal ribs. It also has the peculiarity of a pineal eye, which, however, is not visible on the surface of the skull.

The birds of most interest to casual European visitors are the wingless birds and the parrots and the songbirds.

The kiwi, *apteryx*, now very rare, is about the size of a pheasant; it has no external wings or tail, it has a long, slender beak, and hair-like feathers, in colour generally brownish-grey, spotted or streaked with black. It does not represent the extinct moas, which were also wingless birds, but had other peculiarities. They had long necks, not unlike emus, and some of them attained to enormous size, the heads of some being ten feet or more from the ground.

There are several parrots: the kaka, and the kea. The kakapo is a parrot which, though retaining wings, has lost the power of flight. There are, or were, a number of parrakeets.

The best-known songbirds are the bellbird and the tui. The bellbird is about the size of a thrush, or a little smaller, olive green in colour. Captain Cook wrote of them: "We were awakened by the singing of the birds. Their number was incredible. . . . This melody was infinitely superior to any that we have ever heard; it seemed to be like small bells most exquisitely tuned."

The tui, or parson bird, about the size of a blackbird, is greenish-black in colour, and has a tuft of white feathers at the throat. As the present writer heard the bird's song in Stewart Island, there are three or four notes, quite separate and of different pitch, short but clear as those of a flute, followed by a single note with the timbre of a pulled violin string.

Here follows a very brief outline of New Zealand history; it is much over-simplified, and is intended only to give the sequence of the chief events which led to the British occupation.

When the Europeans first came to New Zealand they found the country sparsely inhabited by Maoris, a Polynesian race. The Polynesians preserved a Stone Age culture down to the end of the eighteenth century. They had no metals, but they were advanced enough to build vessels, double canoes, in which they sailed from the Equator to the South Polar ice, and the whole width of the Pacific, from Easter Island to Cape York. They thus showed great enterprise, ingenuity, skill, and courage.

No doubt numbers of them reached New Zealand from the islands at different times, but traditionally one Kupe visited the country from Tahiti in the tenth century, A.D., and found no inhabitants there, and in about A.D. 1125 Toi Toi-te-huatahi, led a considerable immigration from Tahiti by way of Rarotonga. Several Maori tribes claim descent from Toi. The principal immigration was made about A.D. 1350 by a fleet of canoes, after whose names a number of the existing tribes are called.

The Maoris had no script, but their oral tradition was very highly developed, and Europeans from the first found them both intelligent and shrewd. They were, however, savages, even to cannibalism, and their chief preoccupation was with tribal war. Modern Maori youths

enter schools and colleges on perfectly equal terms, social, intellectual, and athletic, with Europeans.

The first European to sight New Zealand was the Dutch navigator Tasman, in 1692, but he did not land owing to the hostile attitude of the natives. In 1769 Captain Cook was sent by the Admiralty in the *Endeavour* to Tahiti to observe the transit of Venus, and with instructions to explore the Southern Ocean and especially New Zealand. He landed in the latter, surveyed both islands very accurately, and took possession of them in the name of King George III. He visited the country five times in all, for the last time in 1777. De Surville and du Fresne, French explorers, both touched at New Zealand during these years.

The seventy years between the nominal annexation by Captain Cook in 1769 and the actual declaration of British sovereignty in 1840 may be divided as follows:—For twenty years nothing was done; for the next quarter of a century, from 1790 to 1814, an Alsatia existed in which there was anarchy and no government at all. In 1814 missionary enterprise was begun, and with it the civilization of the country, and a good deal of irregular settlement took place during the next quarter-century, at the end of which the British Government was reluctantly compelled to declare sovereignty. This early settlement was almost entirely limited to the North Island, and great difficulties and hardships were undergone by the immigrants.

Between 1840 and 1850 plans were made for two important settlements under Church auspices in the South Island, which ultimately became those of Canterbury and Otago.

In 1788 a convict settlement was made in New South Wales. This prospered from the first, convict labour was to be had, sheep could be raised, and capitalists came out. Soon afterwards trade started with New Zealand in flax and timber; the latter made excellent masts and spars. Many Maoris went to sea before the mast. There was good deep-sea whaling in the neighbouring waters, and sealing round the coasts. Both of these were so wastefully conducted that they ceased to be profitable in a few decades.

The whalers used the harbours of the Bay of Islands, especially about the modern Russell. Many of them came ashore and were joined by deserters from ships and escaped convicts, who between them set up the Alsatia before mentioned, where every available vice seems to have been practised, and taught to the Maoris. Also, the European infections, both acute and chronic, were introduced among them, with disastrous results, since the Maoris had no acquired immunity to them.

The Maoris, indeed, were abominably treated, subjected to physical violence, and often swindled out of their pay for services rendered; their tribal customs were outraged, and they were sometimes even kidnapped. Being proud people and uncivilized, they retaliated, and there was more than one savage massacre. A good many white men "went native," and were known as "Pakeha Maoris."

The natives used them as interpreters and so on with the traders, otherwise they seem to have been beachcombers of a bad type, with a few quite distinguished exceptions.

The Maoris were shrewd enough from the first to recognise the advantage of iron and steel tools over stone ones, and before long they saw the superiority of muskets over clubs and spears in tribal warfare.

The British Government disclaimed all responsibility for New Zealand, though the country was considered in some vague way to be an appanage of New South Wales. Acts were passed to give the Governor of that Colony powers to try British subjects for crimes committed in New Zealand and other places, all of which were specified as not being subject to His Majesty.

England, indeed, desired no more colonies; after the revolt of the Americans in 1776 it became the settled view of the Colonial Office that all such things were expensive encumbrances. It may be noted that the American colonies, whether Royal, proprietary, or chartered, had all had a Governor and two Houses, but the colonies still existing in the early nineteenth century were Crown colonies, ruled by the Governor alone. Canada, an exception, had representative government.

But there was a large accumulation of goalbirds in England after the American War, and there was also serious unemployment, with a like accumulation of paupers. So the settlement in New South Wales was started for the transportation of convicts, and also emigration was encouraged, though this was no more than "the shovelling out of paupers," in order that England might be rid of both classes of undesirables.

A small body of opinion existed in England which had the idea of "colonization" as opposed to "emigration," and looked forward to the establishment of large sections of British society in the waste places of the Earth, where life might be lived according to British traditions, but under more favourable circumstances than at Home. These aspirations materialised as the Dominions of the present day. The holders of these views were ultimately to initiate the colonization of New Zealand.

But the first civilization there was due to missionary enterprise. Samuel Marsden, the principal chaplain of the convict settlement of New South Wales, had a farm at Parramatta, where he entertained a number of sea-going Maoris whom he met in Sydney, and heard their stories. In 1809 he formed the project of a mission to their country for the civilization of the Maoris and their protection from European outrage. This is important, as it accounts for the opposition of the missionaries to British annexation. But before his death Marsden and his chief assistants recognized that this was both inevitable and in the best interests of the natives.

Marsden began with some lay missionaries, a master carpenter, a rope maker, and a schoolmaster; it is to be remarked that the Governor of New South Wales made the latter a resident magistrate in New

Zealand. Marsden took his mission over in 1814, bought some land from a chief, and started a farm, and he paid six subsequent visits to the country. It is not to be supposed that this enterprise was an easy matter; in fact it took ten years to make a convert. But the chiefs on the whole welcomed the missionaries and desired civilization, and a number of stations were started in the next twenty years. Henry Williams, an ordained priest, and Marsden's ablest assistant, had been a lieutenant in the Navy.* Pember Reeves wrote, "Many thousands who never became Christians felt their influence . . . they fought against war, discredited cannibalism, abolished slavery . . . Marsden had a sound belief in the uses of trade in teaching savages the decencies and handicrafts of civilized life. He looked upon such knowledge as the best path to religious belief."

Further, the missionaries, with the help of Professor Lee, of Cambridge, developed a scholarly method of writing Maori. They took the syllables of which Maori words are constructed and reproduced them phonetically in English script.

Meantime, say between 1815 and 1830, the Europeans began to improve their own arrangements; in Kororareka (Russell) they started a Vigilance Society. A number of Europeans came to settle in an irregular way. The method of whaling changed, the whalers were no longer casual visitors, but settlers who lived ashore. Many of them married Maori wives and some of them started farming. Commercial farming in New Zealand was really begun by these men, of whom Pember Reeves wrote, "Half heroes, half ruffians, they did their work and unconsciously brought the islands a stage nearer civilization."

Many attempts at commercial settlement were made by Sydney companies. A New Zealand Company was formed which negotiated for land about Hokianga and elsewhere, but the venture came to nothing. Abortive attempts were also made by the French, which were of importance, since they helped to drive England into annexation; as Pember Reeves cynically wrote, "New Zealand was only annexed by the English Government, which did not want it, to keep it from the French, who did."

But for a long time England would do nothing, and that group of people who favoured colonization, and included many persons of rank and importance, began to make itself felt.

The leader of the group was Edward Gibbon Wakefield. This man, with great powers of persuasion, with imagination, ability, and enterprise, had spent three years in Newgate Prison, which was a stigma considered likely to exclude him from a career in the House of Commons. A possible candidate for transportation, he studied the British colonies, and came to criticize them very severely, more especially the convict settlements. His grounds of objection need not be considered here, but he put forward the idea of establishing a complete cross-section of English society, with the stratification then existing, to any suitable unoccupied country. He had a plan for the supply of labour in the absence of convicts and slaves, which was as

* It is often stated that Williams was one of Nelson's captains, but he joined the Navy in 1806, the year after Trafalgar.

follows:—The land was to be acquired from the natives by some authority and sold to intending settlers at a “sufficient price”; Wakefield suggested £2 per acre for agricultural land. Part of this money was to be spent in bringing out labourers from Home *gratis*, who were to work for wages. In the existing colonies land was given away, and enormous tracts was nominally held by persons who had no labour wherewith to work them.

Wakefield began operations with a “letter from Sydney,” which was written in Newgate in 1829. In 1830 he founded a short-lived Colonization Society, and between 1832 and 1835 he assisted to found South Australia., but he withdrew from that enterprise dissatisfied, and thenceforth gave his chief attention to New Zealand.

In New Zealand the sequence of events was as follows:—After some threats of settlement by the French, the missionaries became alarmed: they might not desire to see British annexation, but they preferred it to French. In 1831, at their suggestion, thirteen Maori chiefs asked for the protection of King William IV against the French, and in 1832 the British Government sent out Mr. James Busby from Sydney as Resident, but with hopelessly prescribed powers. In 1835 there was a fresh move by the French, and Busby induced thirty-five Maori chiefs to declare the independence of their country.

In 1836 a Select Committee of the House of Commons considered the disposal of land in the colonies, and another sat on New Zealand affairs, before which Wakefield gave evidence. It was stated that “New Zealand does not belong to Great Britain, but Englishmen are settling there,” but, as Wakefield said, “in a most slovenly and disgraceful and scrambling manner.” He spoke of the country as the fittest for colonization—it was beautiful, had a fine climate and a productive soil.

It will be understood that a Government Department, essentially conservative and opposed on principle to colonization, was not likely to look with favour on an impetuous doctrinaire, of doubtful antecedents, who was trying to stampede it along a course which had proved unsatisfactory in South Australia and had there cost it a pretty penny.

However, the Select Committee affirmed Wakefield’s principles, and in 1837 he founded the New Zealand Association, and a number of people were found who were ready to go out, capitalists among them, and Wakefield insisted on the necessity for a clergyman. All authorities remark on the high motives which inspired the New Zealand Association. Theirs was not a commercial enterprise, but an undertaking of men and women of high principles, who lent their money and made the personal sacrifice and took the risk of founding communities where people might live under humane conditions. Wakefield selected colonists whom he claimed to be not only “representatives of the best type in every class of society and almost every branch of occupation in England, but to include also a surprising number whose

weight of character, intellectual abilities, and social gifts were invaluable assets to a young colony."

Although the missionary leaders in New Zealand had recognized the need for British sovereignty, realizing as they did that all the evil in the place was due to the Europeans, who required proper government, yet the Church Missionary Society at Home strongly opposed it, in the supposed interests of the natives; and the Colonial Office would give no support either to the Association or to certain French applicants for a charter.

The Colonial Office was apparently willing to grant a charter to a commercial company, which the Association at first refused to become, but in 1838 its leaders changed their minds, the Association was dissolved, and the New Zealand Company was formed, but still could obtain no charter.

Land in New Zealand, of course, belonged to the Maoris, and all settlers had to acquire their land from the natives. A number of purchases had already been made, and others were supposed to have been made; one French adventurer, for instance, thought he had bought 40,000 acres and had to be satisfied with 300. With the prospect of British annexation, a great many speculators, known as "land-sharks," made or pretended to make enormous purchases for trifling sums.

The New Zealand Company was formed to buy land from the Maoris to sell to settlers at £1 per acre, the profit to be used to send out settlers free of charge. About £100,000 was subscribed by the shareholders, and the purchases must have yielded about £150,000 more, since the Company was found to have spent £250,000 on the country.

Here without doubt a fundamental mistake was made, the settlers were buying "pigs in pokes." People bought land in England; that is, they paid £1 an acre for land in New Zealand, but nobody knew of what kind or whereabouts his purchase was.

Since the Government would do nothing, in fact, disclaimed all responsibility for New Zealand, and since the Maoris had declared their country to be independent, the New Zealand Company decided, in 1839, to act independently itself, and sent out Colonel Wakefield, a brother of Edward Gibbon, in the ship *Tory* to buy land and make the preliminary surveys. The colonel selected Port Nicholson, where Wellington, the capital, was afterwards built, and also bought land further north-west in Taranaki. The choice of Port Nicholson was politically far-sighted, but the land chosen was unsatisfactory, and there was serious inter-tribal strife in that district.

The negotiations were no doubt hurried, since after British sovereignty was declared, as it was certainly going to be, purchases would only be possible from the Crown. Colonel Wakefield believed that he had bought twenty million acres from the Maori chiefs for about £9,000. The chiefs had no right, by tribal custom, to make any such sale, and had no intention of thus parting with their lands. But

settlers came out, and continued to come out, and found their situation profoundly unsatisfactory.

Gibbon Wakefield had thus forced the hand of the British Government, and the Colonial Office never forgave him. In 1840 Captain Hobson, R.N., was appointed Lieutenant-Governor, under the Governor of New South Wales, with instructions to negotiate with the Maoris for the cession of the country, and a proclamation was issued in Sydney by which New Zealand was included within the political boundaries of New South Wales. It thus became a British Colony.

Hobson had first to obtain the cession of the country to the Queen, which he did in 1840 by the Treaty of Waitangi. By this treaty the chiefs ceded sovereignty to Her Majesty, but the chiefs and tribes retained possession of their lands, and gave to the Crown the exclusive right of pre-emption over them. That is, no one could buy land from the natives but the Crown, and all purchases by settlers had to be made from the Crown. This was made retrospective, and the Colonial Office did not recognise the Company, so that all the purchases of Colonel Wakefield, besides those of independent settlers and also of the land-sharks, became null and void.

Nevertheless, the Company continued to form more settlements between 1840 and 1842, nearly all in the North Island, but there was one at Nelson, in the South, where a disaster known as the Wairau massacre occurred. The land available was never adequate for the settlers, but they did what they could, and farming, especially sheep-farming, made progress, though in the face of great difficulties and great dissatisfaction. Their feelings are probably well summarized by a remark made by the founder of Canterbury: "I would rather be governed by Nero on the spot than by a Board of Angels in London."

As regards New Zealand in general, Captain Hobson died in 1842, and was succeeded by Captain Fitzroy, R.N., under whom things went from bad to worse, and Maori rebellions led to war. Captain George Grey was appointed as Governor in 1845, and had a remarkable success. He brought the war to an end, and gained the confidence of the Maoris, but he had great difficulties with the white settlers. These demanded a Constitution, which was granted by the Colonial Secretary, Earl Grey, but Governor Grey persuaded him to suspend part of it for five years. In 1852 a Constitution Act was passed, which established six Provinces, with Provincial Councils, besides the General Assembly. One of these was the Province of Otago. The Provincial Councils met before the General Assembly, and a very provincial outlook was established.

Captain Grey was Governor for eight years, during which a high degree of prosperity was attained to in the country, much aided by the demands of Australia for farm produce during the gold boom in that country.

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CHAPTER II

THE PROVINCE OF OTAGO

THE Wakefield scheme was carried out in a modified form in the South Island in two important settlements established under religious auspices: in Canterbury in the northern part by members of the Church of England, and in Otago in the south by members of the Free Church of Scotland. This book is concerned with the latter.

"Otakou" means "Red Earth," ochre, used by the Maoris as a pigment. Large deposits of this substance were found on what is now called "the Otago Peninsula," and forms the Otago Harbour, and to this district the Maoris applied the name. The modern district is much more extensive. It is sometimes said that "Otago" is the English corruption of the native name, but some good Maori scholars deny this, and regard "Otago" as a correct rendering. The difference is of little importance, and only depends on whether the guttural letter is "voiced" or not, and the practice may well have varied.*

For colonization the South Island had great advantages over the North; it is perhaps unfortunate that the first Wakefield settlements was not made there. In the South there were extensive plains which were not covered by bush, and which turned out to be highly suitable for sheep, especially in Canterbury, and, as in Australia, sheep-farming proved to be the most practicable and also the most profitable form of enterprise.

There were far fewer Maoris in the South than in the North Island, and, except for the Wairau massacre, the settlers were free from serious trouble with them. It was remarked at once by the early surveyors that the native population diminished from the moment of its contact with Europeans; at the Molyneux River, for example, the surveyor found only six Maoris, whereas it was stated that two generations before there had been a thousand. The raids of a North Island chief, Te Rauparaha, also contributed to the extermination in the South.

The first white men to settle in the South were the whalers and sealers, whose industry had begun to decline by 1840, and some few of them had taken to farming.

The New Zealand Company had made only one of its first settlements, that at Nelson, in the South Island, and in 1842 it desired to form another, but this was opposed by both the Home and Colonial Governments.

Indeed, the Wakefield scheme suffered severe criticism from those who came out under it. Frederick Tuckett, referred to below, roundly

* Note at end of chapter.

condemned the New Zealand Company, and even affirmed that "the annals of any company's folly and short-sightedness hardly afford a parallel to those of the New Zealand Company." He maintained chiefly that it was wrong to sell specified areas of New Zealand land in England, and that the settlers ought to select their own land after arrival.

In 1842 a Mr. George Rennie, of London, advanced a much more elaborate and better thought-out plan than Wakefield's, which was to be for a Scottish settlement. A site was to be selected, surveyors, engineers and mechanics were to be sent out, the land was to be surveyed, the town laid out, complete with church and school-house, the suburban land was to be cleared, cropped, and stocked. Then, and not till then, capitalists and labourers were to be sent out to take up land, and to crop and stock it from the Company's farm. Definite prices for the land were arranged, which, however, clashed with those charged in other parts of the country. The New Zealand Company gave a qualified approval to the scheme, but required the assistance of the Government, which was as unsympathetically critical as ever.

The settlement was to be somewhere on the eastern side of the South Island, and as time went on and information accumulated, a site in the modern Province of Otago was tentatively proposed. Though Bunbury had come down there for the chiefs' signatures for the Waitangi treaty, very little can have been known of the district except the coast. What little knowledge there was seems to have been due to the enterprise of Colonel Wakefield. Mein Smith inspected the harbour on behalf of the Company, and in 1843 Shortland landed at the head of it, and proceeded south on foot as far as the Taieri River. In 1844 Bishop Selwyn paid a visit there.

In 1843 the Disruption of the Presbyterian Church of Scotland took place, and members of the Free Church formed the project of a settlement in Otago, with proper provision for religion and education. This was all of a piece with Rennie's scheme, and Captain William Cargill and the Rev. Thomas Burns, both of the Free Church, became associated with Mr. Rennie. Rennie brought before the Free Church Committee a statement that the New Zealand Company was prepared to form a Scottish settlement, and to set apart £25,000 for Church and schools associated with the Free Church. However, difficulties continued with the Colonial Office, the Wairau massacre occurred, Mr. Rennie retired on sectarian grounds, and the scheme nearly broke down.

Colonel Wakefield appears to have saved the situation. Governor Fitzroy waived the Crown right of pre-emption and allowed Wakefield to purchase 150,000 acres from the natives, under the superintendence of a Government officer, Mr. Symonds. It was expressly stated that no survey was to be made until the purchase was completed, though how any estimate was to be made of the value of the land without one was not apparent.

Frederick Tuckett was appointed surveyor; he had been employed in that capacity on the Great Western Railway in England under Brunel,

and he had surveyed Nelson, and had not at all approved of its site. He declined to undertake the work in Otago unless he were allowed to explore the whole coast from Banks Peninsula to Milford Sound, and provided that he was not bound to select Port Cooper, now Lyttelton.

Tuckett sailed from Nelson in the *Deborah* in April, 1844, accompanied by Symonds, the Government officer. He landed at Port Cooper with the intention of walking south from there, but his Maori guides failed him, and he went by sea to Moeraki, south of the Waitaki River. From here he walked to Waikouaiti, where Mr. John Jones had a whaling station and a considerable farm, and so on to Port Chalmers, on the Otago Harbour, having observed coal at Shag Point on the way. Tuckett and Symonds soon fell out over the question of surveying, and Symonds returned to Wellington. At the head of the harbour was a place called by the Maoris "Otepoti," of which Tuckett approved for the site of the New Edinburgh, but he determined to go to the farthest south before making his decision. "Otepoti" became "Dunedin."

He went on foot from Otepoti to Taieri Mouth, where he was taken across the river by some whalers, and he continued his march as far as the Molyneux River. Here he took ship again and sailed on to Stewart Island, at the extreme end of the South, then called the Middle, Island. On his return to Port Chalmers he bought, with the sanction of Mr. Symonds, 400,000 acres for £2,400, or three half-pence an acre, for which he paid in notes, gold and silver. Only 150,000 acres were charged to the Company, the rest was for "depasturage," the right to run cattle and sheep. A hundred and fifty natives were present at the sale, and the chiefs and twenty-two members of the Ngaitahu Tribe signed the agreement. The land bought stretched from the Taiaaroa Heads to the Nuggets, with well-defined inland borders. Native reserves were set aside within it.

Tuckett, assisted by a staff sent down from Wellington, began to lay out the town and suburbs, but funds failed, and, on receiving instructions to incur no further expense, he resigned and returned north, leaving Davison, an assistant surveyor, in charge of the Company's property. In 1845, funds for the resumption of the surveys having become available, Charles Kettle was appointed to control the work. He arrived in Otago Harbour in the *Mary Catherine* on February 23, 1846, bringing with him a full staff. To Davison and the few settlers who had in the meantime taken up quarters in the harbour in the anticipation of the settlement, his appearance was welcome. Before leaving Home Kettle had visited Edinburgh and studied the topography, and when, with Robert Park, he came to lay out "Dunedin's" streets, he named many of them after those of the Scottish capital.

Meanwhile the scheme of settlement was not making rapid progress in Scotland. The Free Church ministers approved the plan but would undertake no business, so a "Lay Association" was formed to promote sales of land. The difficulties with the British Government continued,

but Lord Grey made a considerable grant to the Company, which was to purchase land, charter vessels, and undertake public works, while the Lay Association selected emigrants. All properties were to consist of town, country, and suburban sections, and trustees were appointed for religion and education. The "complete section of Home society" was to replace random emigration.

The 150,000 acres were surveyed into 2,400 properties of three allotments each.

In 1847 the New Zealand Company handed its rights to the Lay Association, subject to the payment to the Company of an agreed proportion of the receipts from sales. The whole acreage was to be sold within five years at £2 per acre. Colonists were to be despatched in parties at intervals, each party to start after the sale of 400 properties.

The sale of the whole block would have yielded about £300,000, which was to have been expended as follows:—Three-eighths, about £100,000, on emigration and labour; two-eighths, about £70,000, on civil uses, surveys, roads, bridges, etc.; two-eighths to the Company for the use of their capital and their risk; and one-eighth was handed to trustees for religion and education, part to go in purchase of an estate. The educational fund has this interest, it was applicable to the "erection and endowment of a literary chair or chairs in any college or university in the Province of Otago."

However, a good deal of the scheme remained on paper, since the block was not sold in five years; in fact, in 1852, only 18,000 acres had been disposed of.

But a beginning was made when the *John Wickliffe* and the *Philip Laing* arrived at Port Chalmers in 1848 with about 350 emigrants, and with stores, building materials, and specie, under Cargill and Burns. On landing from boats at Otepoti, they were housed in barracks built of grass and rushes. The *Victory*, *Blundell*, and *Bernicia* arrived during the year.

The immigrants can hardly have thought that they had arrived in a paradise. The only landing place at Otepoti was at the mouth of the Toi-tu Creek; this appears to have been the native name of a stream which now flows underground. The commoner tradition is that the landing was at the Kaituna Creek, but that flows into the harbour further to the south (Mr. A. Eccles, personal communication). At any rate, where they landed was the only hard ground in a wilderness of mud flats. This is the place indicated by the tablet in Water Street.

The site consisted of a flat area covered with flax, cabbage-trees and Maori-heads, containing much marsh, and all within a semi-circle of hills, some hundreds of feet high, with steep spurs covered with heavy bush. The streets, named after those in Edinburgh, had been cleared of flax and pegged out, though, as shown in the original plan with the high-water mark of the period, many of them must have been under water, at any rate at high tide. But there is no pioneering without hardship.

Everything, of course, was very primitive, but from the start there was prosperity for those sufficiently far-seeing and hard-working. For instance, Donald Reid arrived in 1849 at the age of 15. He first worked as a farm hand, and in the following year he leased two acres; in 1852, when aged 18, he bought twenty acres, and in 1854 he bought 180 acres more. In 1856, after seven years in the country, and at the age of 22, he moved to the Taieri Plain, where he took up 300 acres at 10/- an acre, with the obligation to spend £2 per acre on improvements within two years. So from the very first there was money to be made.

The difficulties of the country are well illustrated in the account of his land on the Taieri Plain. The plain was largely swamp of varying depth, covered with raupo (bull-rush), Maori-heads, flax and rushes, and hereabouts there was not much bush to supply the timber required for building. The rising ground was a wilderness of high fern and manuka scrub, with flax, bramble and tutu. The first cattle did well on the native grasses, but the rabbits ate them all out; everything had to be burnt off and then English grasses were sown. The settlers lived in clay-walled wattle-and-daub houses with thatched roofs.

The early days, say from 1850 to 1855, must have been days of much hardship. The roads out of Dunedin were few and unmetalled, and considerable doubt was thrown on the suitability of the district for agriculture; however, the back country made excellent sheep-runs, and the settlement showed a surplus of £900 after a year and a-half, and people appear to have lived fairly comfortably in a very small way, and chiefly by barter.

In 1850 the New Zealand Company resigned its charter to Lord Grey and went out of business. It was thought on the whole to have failed. In Otago the promised public works had not been carried out, sales of land had been few, and the Company had not been reimbursed for its expenditure on emigration and survey. The exalted educational projects had not been fulfilled, there was only an elementary school, which was poorly attended, and parents appeared to be indifferent. The limitation of the settlement to the Scots had begun to break down, though to this day the constantly reiterated claim to be "a Scottish community" is manifestly established. A Settlers' Association came into being, which pointed out the backward state of things; the revenue was misapplied, the grants for roads were not spent, the harbour pilots and the harbour lights and buoys were alike neglected.

In 1853 the provinces were established, and Captain Cargill was elected Superintendent of Otago, and, it may be noted, Dr. Williams was appointed Colonial Surgeon.

From this time onward things began to improve, the Australian gold boom assisting. Immigration had hitherto been very small, and in 1857 money was raised by loan and debenture to bring out settlers, with the result that the increase in population went up from 500 to 2,800 a year. These people came largely from Australia, when the gold boom in that country had come to an end. The Australian gold boom and

the introduction of steamers led to a large increase of trade with Melbourne.

In 1855 there were 6,500 cattle and 59,000 sheep in the Province; in 1861 there were 44,000 cattle and 694,000 sheep. The receipts from Crown lands were £2,000 in 1855 and £66,000 in 1859. Besides that spent on immigration, money was borrowed for public works. Roads of a sort were made from end to end of the province, £30,000 being spent on them, and £2,000 was spent on the main streets of Dunedin; a famous "cutting" was made in Princes Street, through what was known as Bell Hill, and the soil removed was used for the reclamation of the foreshore. Money was spent on education, teachers were imported, and a new High School was built. Apart from that there was little improvement in Dunedin, which had natural drainage only.

In 1860 Captain Cargill died, and was succeeded as Superintendent by Mr. James Macandrew, a very notable figure in the foundation of the future Medical School.

After 1860 the great change came with the discovery of gold in Otago by Gabriel Read in 1861. The gold got went for a time as high as 8,000 ounces per week, and 20,000 immigrants arrived by the end of the year. The revenue in 1860 was £97,000, in 1861 £470,000. So there was plenty of money, and by 1871 there were 100 schools in the Province, and the University of Otago had been founded.

Conditions in Dunedin during the sudden and overpowering increase in population, due to the gold rush, in a young settlement must have been simply appalling. Some idea of them can be formed from the late Dr. Fulton's book, "Medical Practice in the Early Days in Otago and Southland." In 1860 Dunedin was a straggling village, unmetalled and unlighted; in the northern part of the main street horses might be bogged to their bellies; Frederick Street, which forms one side of the later Hospital block, was considered a quite hopeless morass. There was no drainage system or other kind of sanitation, and no town planning; buildings were all over the place, and very flimsy in character.

Upon such a place descended a swarm of diggers; the shipping entering the harbour rose from 69 to 467 vessels in a year; some ninety hotels, so-called, and forty boarding houses were constructed, and a canvas town sprang up almost overnight. There was extreme disorder among the diggers, naturally enough; fires were numerous and there was no proper water supply. Epidemics occurred of typhoid and scarlet fever, diphtheria and infantile diarrhoea, and the death rate first doubled and then trebled itself.

All this made very heavy work for the doctors; there were four in practice before the gold rush, but a good many others were attracted by this, and the number rose to twelve, and later to twenty-seven. However, the gold boom did not last long, and by 1867 the number of doctors was reduced to about twelve.

It must have been evident that much reform was required, and a Sanitary Commission was appointed. Even so, a photographic panorama taken in 1864, and now in the Public Library, shows a continuous

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row of business premises on the main street in apparently good order, and where the road is visible it appears to be metalled, and the foot-paths appear to be paved and lighted.

It was about this time that steps were taken which established the hospital on its permanent site and helped towards the establishment of the Medical School.

A NOTE ON THE NAME OTAGO.

It is disputed whether this is properly "Otago" or "Otakou"—that is, whether the guttural consonant should be pronounced as a voiced "g" or as an unvoiced "k."

I have tried to find out the correct, that is, the original Maori, pronunciation of the word, and I have referred the matter to Dr. Wi Repa, Mr Johannes Andersen, of the Turnbull Library, Wellington, and to Dr. H. D. Skinner, Director of the Otago Museum.

Dr. Wi Repa informed me that the elders of the Maori Community of his time, about 1900, called the place "Otakou," which he regarded as correct Maori, but he added that the race had been in inferior relation with the pakeha for nearly 100 years, and that all critical interest in the language had waned.

Dr. Skinner referred me to a note in the Journal of the Polynesian Society (vol. 43, 1933, p. 132) by the late Sir Frederick Chapman, who was a man of exceptionally wide knowledge. Chapman insisted that the "g" sound was correct, and that the Europeans had thus reproduced the sound made by the Maoris. He had known Maoris born in the first quarter of the nineteenth century who sounded the "g" in Otago, and he quoted Mr. John Jones, a very early settler at Waikouaiti, whose experience had been the same. Chapman also quoted W. B. D. Mantell, whose business it was to supervise sales of land by Maoris to pakehas in Otago. He often wrote "g" in the phonetic rendering of place names.

Mr. Andersen (who regarded "Otakou" as correct) informed me that in 1848 the Governor desired to call the new settlement "Otakou," but the Association in Scotland had made all their arrangements, using the name "Otago," and it was felt that the change would only be confusing, so "Otago" became the official name.

Whatever the correct name, it originally belonged to a village near the south head of the Otago Harbour, and was extended to include the harbour itself. Its application to a large province was due to the British Government.

It seems probable that the Maori guttural consonant was always unvoiced, a "k," in the North Island speech, but was sometimes voiced, a hard "g," in the South Island; in other words, the southern Maoris used both hard "g" and "k" sounds, as do the English. Professor Lee, who rendered Maori speech into English phonetic equivalents, worked in the North Island, and the North Island dialect became classical, and is preserved as such at Te Aute College, the principal school of Maori culture. But there is considerable evidence that in its own neighbourhood the guttural consonant of the name of this place was voiced by many, at any rate, of the South Island Natives.

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CHAPTER III

THE FIRST DOCTORS THE DUNEDIN HOSPITALS HOSPITAL ADMINISTRATION IN NEW ZEALAND

THE first doctor to practise in what became the Province of Otago was one Dr. Joseph Crocome, who came in 1836. His father was a West Indian planter, who lost his money on the abolition of slavery. The doctor was wrecked in the Pacific Ocean, out of which he was picked up from a boat, and he landed in Sydney with the clothes he stood up in, and was fortunate in that these were supported by a money-belt which contained the doubloons he had received for the treatment of the Spanish Governor's wife in Chile. He accepted an appointment in charge of a whaling station at Otakou on what is now called the Otago Peninsula, and later moved to Waikouaiti, some twenty miles up the coast. The squalor of life on a whaling station with its filth and stench, the hardship of journeys up and down the coast by boat, and across country on foot, for there were no horses and few tracks, and a diet limited to damper, oatmeal, pork, birds, fish, and tea without milk, make up a picture which can have had few attractions for an educated man.

When the settlement proper began each of the ships had a "surgeon superintendent," but not many of them stayed about Dunedin for very long. Henry Manning, of the *John Wickliffe*, was the first to practise, but he had peculiarities which were against much professional success. Robert Williams, of the *Bernicia*, first settled on the Taieri Plain, but later moved into Dunedin, where he became "Colonial Surgeon" and was the first man to have charge of the hospital. He went into local politics. William Purdie, a homœopathist, became a justice of the peace and did a great deal of public work.

In 1857 Edward Hulme was appointed Provincial Surgeon, the Colonial appointment having been abolished, and he must have been a very able man. He had been on the staff of the Exeter Dispensary. He had studied surgery in London under Sir Charles Bell, Astley Cooper, Cline and Liston, and also in Paris; he was a Jacksonian prizeman, and in 1866 he was elected a Fellow of the Royal College of Surgeons without examination. He had charge of the first and second Dunedin Hospitals. He was an original member of the Otago University Council, on which by some accounts he was a strong advocate of the formation of the Medical School but by others he regarded the proposal to form it as "premature." He understood anæsthesia, and saw the introduction of antiseptis. He retired in 1877 and died very soon afterwards.

THE FIRST DOCTORS

Andrew Buchanan came out in 1857 and introduced the humane treatment of lunatics, then new.

Alfred Eccles, of St. Bartholomew's Hospital and elected a chartered fellow of the Royal College of Surgeons in 1858, came out in 1861 and had great influence. He was the moving spirit in a series of undertakings which are thought to have contained the germ of the Otago Medical School, though he had no direct hand in its foundation.

In 1851 it was decided to build a hospital, and the first was put up on the site of the present Town Hall in the Octagon. There was considerable opposition to its establishment: it was held by many to be a useless extravagance in a place where health was so good. It is said in one account to have been unoccupied for two years, in another to have had only three patients during its first year. Dr. Williams was put in charge of it; he was thought to be trying to obtain the post of Colonial Surgeon from Sir George Grey, which was regarded as a sinecure and a burden on the local finances.

The accounts are rather confused, but apparently in 1853 Williams was made Colonial Surgeon, and in 1857 Provincial Surgeon, but he resigned this post to become coroner. Hulme succeeded him, and he had the real charge of the hospital. It was no doubt a ramshackle affair; for a good many years the patients were few, and the local lunatics were housed there instead of in the gaol, which seems to have been regarded as the proper place for them. There were no nurses, only male attendants, and administration was no doubt very difficult. Up to 1858 there seem to have rarely been more than twelve patients there.

By 1858, when the increase in immigration occurred, the site, which was over cesspools, and the buildings, which were eked out with out-houses, were condemned as unsatisfactory. What it must have been in the days of the gold rush will not bear contemplation.

In 1862 a bazaar was held for the benefit of the Anglican Church, together with a small exhibition. This was followed by a very ambitious Exhibition of Industry and Art, which was held in 1865. The exhibition building, of stone, was in King Street, and was built at a cost of £18,000, with the intention of its being retained as a market, but the authorities were persuaded, probably by Hulme, to have it used as a hospital, and thither the patients were removed from the Octagon in 1866. The beds in the old hospital had increased to 210, of which 124 were occupied at the time of its removal.

The King Street building, around which many others were put up, was only pulled down in 1936. Seventy years is a long life for an exhibition building.

The new building had six male wards of 18 beds each, and two female wards of 16 beds each, and an annexe for lying-in patients with eight beds. There was a dispensary and a library and some accommodation for out-patients, and also for a few Chinese lepers.

Hulme was in charge of the new hospital; in 1867 he had a resident medical officer and an honorary staff of two practitioners. After his retirement in 1867 a larger honorary staff was appointed.

The King Street building was, of course, never designed for a hospital, but it was at least a large, solid structure, and no doubt a great improvement on the old affair in the Octagon. Also, by 1866, hospital design had not progressed very far, and hospitals put up about the same time in London leave a good deal to be desired by the least exacting of modern standards. It had no doubt obvious defects, which called forth serious criticism.

Medical students were first admitted in 1878. In 1887 a new operating theatre was built. In 1889 female nurses were first trained there.

In 1890 the wards were considered insanitary. One of the surgeons refused to operate again until the conditions were improved, and a Royal Commission of enquiry was appointed. This recommended the building of new wards, the extension of the employment of nurses, and the building of a nurses' home; these recommendations were all carried out. In 1892 the "Campbell Pavilion" of two wards, called "Miller" and "Houghton," after two chairmen of the Hospital Trustees, was opened. Mrs. Robert Campbell had bequeathed £5,000 to the Hospital Trustees. These were the first modern wards built in New Zealand, and they had cross-ventilation, good floor space, lighting and heating, together with sidwards, and adequate kitchen, sun-room, bath and lavatory accommodation. In time a similar pavilion, now used for medical cases, a children's block, and a more elaborate surgical pavilion were gradually added.

In 1937, when the original exhibition building had been pulled down, it was replaced by one containing administrative offices and new wards for cases of metabolic disease and for mental cases, and an operating theatre and wards for ophthalmic and other specialists' cases.

An X-ray plant was first set up in 1904, and X-rays came to occupy a large department, where radium also became available. A maternity hospital was opened in 1938; an out-patient department and a dispensary were built.

At the time of writing (1941) there is a hospital for infectious diseases a mile or two away on the outskirts of the city, and there is some limited accommodation for the same, known as "Isolation," in the hospital grounds. The hospital for tuberculosis is also some way outside the city, and from it recoverable cases are sent to a not very well sited sanatorium at Palmerston, some twenty-five miles away. The Mental Hospital for the district at Seacliff is also about twenty miles away.

The main hospital occupies the same city section of five acres as of old, and is bounded by King Street, Frederick Street, Cumberland Street and Hanover Street, in the old Edinburgh nomenclature. The

THE FIRST DOCTORS

Maternity Hospital and the Nurses' Home occupy most of the neighbouring block on the opposite side of Cumberland Street.

Hospital administration in New Zealand is divisible into four periods. The first is that of the Provincial Government, from the establishment of the Provinces in 1853 to their abolition in 1875; the short time from the building of the first hospital in 1851 to the assumption of provincial control is generally neglected. The second period, 1876-1885, was one of central government, the third, 1886-1909, was under Hospital Trustees, and the fourth, which has been in being since 1910, is under Hospital Boards.

From 1853 to 1875 the hospitals were a charge on provincial funds; they were local institutions provided by and maintained for local taxpayers. When the Central Government took charge in 1876 an Inspector of Hospitals was appointed, and many different methods were tried in different places; for Dunedin a Hospital Committee was appointed. The English method of finance by voluntary contributions was tried, with such Government subsidy as might be required, but the arrangement did not work well. Some districts seem to have taken pride in their local hospital and subscribed liberally to it; this was the case in Otago, but in others everything was left to the Government, and it was felt that the people were being pauperised. There was no specific subsidy on voluntary subscriptions, and management was extravagant.

In 1885 the "Hospitals and Charitable Institutions Act" was passed. By this Act Boards of Trustees were appointed by County Councils and Municipalities, which were locally assessed for the maintenance of the hospitals, with a Government subsidy. Decentralization and uniformity in distribution of subsidies was thus attained. It was hoped and intended that voluntary contributions would continue, but the imposition of a rate promptly put a stop to them as far as hospital maintenance was concerned, but the public always subscribed generously to appeals for new buildings; this has been very manifest in Dunedin.

In Dunedin, naturally enough, the Trustees and the teaching staff of the School, which was by then in being, did not invariably see eye to eye, and in 1892 Dr. MacGregor, then Inspector of Hospitals, took occasion to observe that Dunedin Hospital was obviously at the head of the hospital system of the Colony owing to the presence of the Medical School, but that the local government did not meet its requirements, because of the lack of recognition of its importance by the local ratepayers. The Trustees had indeed opposed the school, and the admission of students to its wards.

However, in 1901 the University Council met the Hospital Trustees and put forward requests for an increase in the number of beds and for the appointment of an out-patient physician and an out-patient surgeon, and also suggested that the Trustees and the University Council should apply to the Government for a Bill to provide that the two bodies should jointly appoint the honorary staff of the hospital.

Two lecturers had at one time and another been put off the staff as the result of differences of opinion with the Trustees, and this led to the University securing legislation which gave teachers assured facilities in the hospital; this was definite recognition that the University had a standing in the hospital.

This recognition was completed in 1926 by the establishment of a Joint Relations Committee of the University Council and the Hospital Board, borrowed from an American model, which controls appointments to the medical staff. At the same time there was some internal reorganization. Chiefs of service were appointed in the several departments, with resident medical and surgical officers, who were also to act as tutors to the students.

In 1900 a "Public Health Act" set up a Department of Public Health under a Minister of the Crown, with a Chief Health Officer and District Health Officers. In 1909 a "Hospital and Charitable Institutions Act," often known as "Valentine's Act," after the Chief Medical Officer of the time, abolished the Trustees, and set up the system of Hospital Districts, of which there are forty-four, a number which is generally considered far too great. The districts are governed by Hospital Boards elected on the adult suffrage every two years, simultaneously with the Municipal and County Councils. The latter authorities make a direct levy according to the rateable capital value of the district on behalf of the Hospital Boards, on which the Government subsidy is paid.

The "Public Health Act" of 1900 was repealed by the "New Zealand Health Act" of 1920, which established a Department of Health under a Minister, with a Director-General of Health, who has under him the directors of a number of divisions, including the Division of Hospitals.

In 1940, under the terms of the "Social Security Act," honorary staff appointments have been abolished, and the visiting staffs of all public hospitals are now paid for their services.

In 1939, at the end of the period under survey, the Otago University Medical School had thus access for clinical instruction to a hospital of some three hundred beds in wards well designed, if not of the most modern type, with medical, surgical, children's and orthopædic departments. The operating theatres were adequate, though decidedly old-fashioned, but there were very good modern specialist wards and theatre, besides temporary accommodation for mental cases and a ward for the treatment of cases of metabolic disease. There was an ordinary out-patient department and an excellent modern maternity hospital, though the latter was too small for the instruction of the number of students in attendance. The chronic hospital and fever hospital were both too small and too far away to be of much use to students; the sanatoria and the mental hospital were also at considerable distances.

The X-ray department had become very good; pathology and bacteriology were both under the University professors of those sub-

jects, and the work was done in the Medical School buildings across the road.

From 1925 onwards students were allowed to spend their sixth, that is, their final year, in the hospitals in the other centres—Auckland, Wellington, and Christchurch. This arrangement, which greatly increased the students' potential experience, was due to the enterprise of the late Dr. Frederick Bevan Brown, of Christchurch, who induced his board to permit it and his colleagues to undertake the considerable burden of teaching.

On paper it would appear that the number of beds at Dunedin was ample for all requirements; in practice the number of patients that pass through a New Zealand hospital is a good deal less than that which passes through a London hospital with the same number of beds in the course of a year. The reason is that there is very little convalescent accommodation, and nothing, or hardly anything, corresponding to the old infirmaries of the London parishes, and the public is most reluctant to undertake the charge of sick relatives, and has indeed been excused from any obligation to do so by Act of Parliament. The result is that patients stay in hospital for a very long time and to a much more advanced stage of convalescence than is customary in England. Under the Act in question the public is relieved of all charges for hospital maintenance, and people have discovered that they are quite unable to look after the chronic invalids in their own homes. All this has reduced the number of new cases admitted to the hospitals very materially, and these are what are chiefly required for the instruction of students. The difficulties have been intensified by a very great increase in the numbers of students, which became serious in the later thirties.

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CHAPTER IV

THE UNIVERSITY OF OTAGO AND THE UNIVERSITY OF NEW ZEALAND

As has been seen, the Otago settlement was made on a far better considered plan than had been attempted elsewhere in New Zealand. Education had been provided from the beginning with the stipulation for educational endowments. One-eighth part of the receipts from the sales of land were to be devoted to religious and educational purposes. Little came of all this at first, but with the establishment of the provinces in 1853 things began to improve. Teachers were imported and a high school was built, although the first rector found himself only an elementary schoolteacher. However, by 1860 the Province had undertaken both primary and secondary education, a new high school had been built, and some eighteen schools were in being about the countryside.

In the original scheme it had always been intended to set up a university. In 1858 the Provincial Council authorized reserves to be set apart for educational purposes, which were to include a *College*, which, in Scotch parlance, means a university. In 1866 the Presbyterian Church applied for a private Act of Parliament to fix the disposal of its trust funds, of which one-third was to go to the maintenance of chairs in a college or university in Dunedin, the Church needing opportunities of secular education for its divinity students.

The question of a university was debated in Parliament in 1867, and the alternatives were discussed of granting scholarships to be held at universities in Great Britain and of making a university in New Zealand. The latter project was supported by Otago, but was rejected by the Parliamentary Committee.

Otago, with its gold boom, was at this time by far the most wealthy and prosperous settlement in the colony, and also the most populous. Thompson, in his *History of the University*, writes of it as having "a wider outlook and a firmer self-confidence," and also writes that "behind the men of vision who founded Otago University stood a community throbbing with vigorous life, full of enterprise and resource and looking forward to a future of unlimited prosperity." And so Otago decided to have a university of its own.

In the "University of Otago Ordinance" of June 3, 1869, occur these words: "Whereas it is expedient to promote sound learning in the Province of Otago, in the Colony of New Zealand, and with that intent to establish and incorporate a University at Dunedin, in the said Province of Otago, open to all classes and denominations of Her

Majesty's subjects: be it therefore enacted . . . I. A University consisting of a Council and Senate shall be established at Dunedin . . . XI. The said Council shall have power to confer after examination the several degrees of (*inter alia*) Bachelor of Medicine, Doctor of Medicine . . ."

There were to be three chairs—one of Classics and English Language and Literature (Sale), one of Mathematics and Natural Philosophy (Shand), and one of Mental Philosophy and Political Economy (MacGregor), the last chair came to be maintained by the Presbyterian Synod as a chair of Mental and Moral Philosophy.

In 1869 the Provincial Council passed the "University of Otago Ordinance," to quote Thompson again, "by which the University was erected as a corporate body, with power to grant degrees in Arts, *Medicine* (author's italics), Law, and Music; its governing body was to consist of a council of twelve, of whom at least six should be laymen, and of a Senate . . . This latter body never came into being, for . . . the University of Otago, in 1874, was merged in the University of New Zealand and surrendered for the time being its degree-giving powers."

But the prosperous and progressive Otago of the period was far ahead of New Zealand in general in this matter of higher education. The General Assembly in Wellington would have none of it, and in 1868 passed "The University of New Zealand Endowment Act," which merely provided for scholarships tenable at British universities. Otago went its own way, and in 1869 the Otago University Council was appointed and met at Dunedin. At the first meeting the Rev. Dr. Burns was elected Chancellor, Hon. Major Richardson Vice-Chancellor, Mr. Strode Treasurer, and Mr. Hislop Hon. Secretary. The Council decided upon the three chairs mentioned, and considered a letter from the Superintendent of the Province, in which he pressed for a School of Mines and Agricultural Chemistry as matters of local need. The University Council therefore approached the Provincial Council for help in founding a Chair of Natural Science with a leaning towards chemistry and mineralogy in their application to mining and agriculture. One hundred thousand acres of agricultural land was put in trust for the University. Dr. James Black became Professor of Chemistry.

Great pains were taken in the selection of the professors, and there is no doubt that in George Samuel Sale, John Shand, Duncan MacGregor, and James Black, four men of quite exceptional quality were secured.

By 1870 the University had thus been established in Otago and its Council had met, and no other province had done anything of the kind. There can be no question that Otago was quite right; it was in a position to provide higher education for its people, and saw no reason to wait till Domesday, or till a hypothetical University of New Zealand should provide it elsewhere. But clearly a difficult situation arose for the rest of the Colony. Was the University of Otago, which was in being, to become the University of New Zealand, situated as it

was in the southern half of a long pair of islands, in those days of slow transport? A Parliamentary Committee appointed to consider the matter advised that a University of New Zealand should be created, amalgamated with that of Otago, and established at Dunedin.

There were obvious geographical objections to this plan, and it roused the most violent interprovincial jealousy. Further, important questions had arisen as to the relative functions of a university and a college. London University had recently been established as an examining body and nothing else, and the view was put forward that a college should teach and a university examine. Most vigorous opposition to the Otago scheme came from Canterbury, especially from Mr. Tancred, afterwards the first Chancellor of the University of New Zealand, and from Mr. Rolleston, Superintendent of the Province of Canterbury, both able men. They concluded that there ought to be a University of New Zealand, with affiliated colleges. This controversy was very long lived; Mr. Beaglehole* has dealt with it at length, but its details do not concern the present volume. The compromise arrived at was The New Zealand University Act of 1870, which established the University of New Zealand, with a Council and Senate: this had power to affiliate colleges and to confer degrees, and it received a Government subsidy of £3,000 a year. Otago University was empowered to dissolve itself and to transfer its endowments to that of New Zealand: if this were done within six months the University of New Zealand was to be established at Dunedin, but if the time elapsed without this change having been made, the University of New Zealand might be established at any place selected by the Governor in Council.

This was in 1870. Otago was ready to amalgamate, but found that it was likely to lose its endowments, and also considered that it was inadequately represented on the New Zealand University Council. Nine months elapsed before a meeting of this Council was called at Dunedin, though this was through no fault of Otago. The New Zealand University established itself as the examining body, and Otago University had to become an affiliated college. However, for some time it acted independently, and in due course, in 1874, it conferred a degree upon one of its students, but only upon one—W. A. Williamson, B.A.

Meanwhile Otago proceeded to the appointment of its first professors, who arrived in June, 1871. The University was opened with 81 students, and their number never fell below 50, which was a far larger attendance than at either Sydney or Melbourne during their early years. Women were admitted from the first; in fact, New Zealand was the first British University to grant degrees to women.

Otago was a Provincial University, and the question arose as to its power to grant degrees, and, if granted, of their recognition elsewhere without a Royal Charter. Both New Zealand and Otago applied for charters, but at this time they were refused. A Royal Charter was granted to the University of New Zealand in 1876, and supplementary charters were granted later. Otago never received a charter to empower it to grant degrees.

* Note at end of chapter.

In the matter of affiliation Otago felt a genuine grievance in that it was giving true higher education to students past the High School stage, whereas several high schools which were doing a little advanced work were affiliated to the University of New Zealand; with these Otago refused to be associated.

In 1874 Canterbury University College was founded and sought affiliation with the University of New Zealand and proposed joint action with Otago. Ultimately the Act of 1870 was repealed and replaced by the New Zealand University Act of 1874. This University became an examining body; it was in no way to interfere with the affiliated colleges, but was to accept their candidates. Otago forewent its claim to grant degrees of its own, but retained its title of "University" as against that of "University College" in Canterbury and elsewhere. Both Otago and Canterbury retained their endowments and their administration, and established a standard for their degrees. Auckland University College was founded in 1884, and Victoria University College (Wellington) not till 1897.

In 1910 a "University Reform Movement" was started on the ground that the University of New Zealand was out of date. This ended in the University of New Zealand Amendment Act of 1914, by which the constitution was altered, and a Senate, a Board of Studies, and a Court of Convocation were set up. Their composition is immaterial to the present volume. Later, in 1923, a Royal Commission set up an Academic Board, with other changes in the details of administration.

It had always been intended that Otago University should give both general and professional education, and from very early days schools of mining, engineering, law, and medicine were all considered. In 1871 the Provincial Council decided that 10,000 acres reserved in Southland for education should be applied for the benefit of the University, and the Superintendent suggested to the Colonial Secretary that the money derived from it would permit the establishment of a fifth chair, probably one of Medicine and Anatomy, which would lead to a School of Medicine in conjunction with Dunedin Hospital. However, this money was not made available till 1874. In 1871 a committee recommended lectures in both law and medicine, and those in law were begun in 1873; in the hard times that followed the law school had to be closed in 1902, but was gradually re-established between 1908 and 1912. Classes on medical subjects were decided upon in 1873; the establishment of the Medical School will be discussed in later chapters.

A Mining School was started in 1873: for many years the attendance was very small, and it was carried on under great financial difficulties. These were ultimately overcome, and the school, though a small one, teaches to a very high standard, and its graduates and diplomates are well received in countries far removed from New Zealand.

The South Island was more populous than the North till 1896. Since then the population of the North has exceeded and now considerably exceeds that of the South. It is commonly held that in the matter of university education the South Island was at least ten years ahead of the North, so that the majority of the professional schools became established there, more especially at Dunedin, where the presence of the Medical School facilitated the later foundation of those of Dentistry and Home Science; and a Veterinary School, which was proposed but never materialized, would also have been there.

This has, of course, led to some jealousy on the part of the North, and Auckland has made repeated attempts to get a better share. A medical school has several times been proposed for Auckland, a project always strenuously opposed by Otago. Auckland also claimed the Mining School, on the grounds that Otago already had two special schools, Medicine and Mining, both of which were carried on at a loss, and needed Government grants to keep them solvent; ultimately Auckland had a Mining School of its own, but that at Otago was not closed.

All this of necessity made great difficulty in the equitable distribution of statutory grants between the different colleges, owing to the expensive nature of the special schools. Ultimately Otago had Medicine, Mining, Dentistry, and Home Science; Canterbury had Engineering and Agriculture; Victoria (Wellington) had Law, Economics, and Political Science, and Auckland had Architecture and a Mining School.

At Otago the Dental School was established in 1907. A Chair of Domestic Science was offered to Canterbury, but declined. It was offered to Otago in 1909 and accepted, and it was opened in 1911. In 1912 classes in accountancy for the B.Com. were started at Otago.

When Otago University was first opened it was housed in a building in Princes Street, Dunedin, which had been intended for a Post Office. The University was doubtless fortunate in finding a large building which was ready for occupation, but it was one which had never been designed for such a purpose, and it turned out quite unsuitable. It afterwards became the Colonial Bank, and later the Stock Exchange.

The present site of the University, where the medical work was for long conducted, was purchased in 1877, and buildings were begun upon it in the same year. Those for the Medical School were built in 1878, and new ones on another site were not called for till 1914. These were opened in 1916; they were for subjects not previously much studied, and were put up in the neighbourhood of the Hospital. The old ones were still used for pre-clinical subjects until another school alongside of the new buildings was opened in 1927.

The site of the University which was purchased in 1877 lies between Castle Street, Union Street, Leith Street and St. David Street, with the Water of Leith flowing along the Castle Street side of it. The whole enterprise turned out to be very expensive, and the buildings cost

a great deal more than had been anticipated, with the result that the University Council was financially crippled to a very serious extent.

The history of the place is of one continual struggle with monetary difficulties. As has been said, the "'sixties" were a boom period in New Zealand, with the gold rush and the very high price of wool, and naturally the opinion commonly held was that all the to-morrows would be as to-day, and that a period of permanent prosperity had arrived. But here, as elsewhere, booms are followed by slumps; the price of wool fell, the output of gold decreased, the depredations of rabbits became serious, and the land boom collapsed. The University therefore came between the millstones of shrinking revenue and growing expense. Its funds were chiefly derived from pastoral rents, which fell with the fall in the price of wool; they fell, indeed, from £6,726 to £4,450, or by rather more than one-third. Money had to be borrowed and raised on debenture. In 1876 the provinces were abolished and the ear of the Central Government in Wellington was much less sympathetic than that of the old local council.

In 1901 it was found that the University had exceeded its income by £150 per annum for the preceding eight years. It was impossible to keep the Medical School up to date, students were falling off, more New Zealanders were going home, expensive extensions and improvements in personnel and equipment were required, and it became necessary to appeal to the public. These events will be described in their place so far as they affect the history of the Medical School.

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CHAPTER V

ESTABLISHMENT OF THE MEDICAL SCHOOL APPOINTMENT OF DR. COUGHTREY

IN his History of the University of Otago Professor Thompson states that in its early days many requests were received by the University Council for classes both in Law and Medicine. Very little evidence of these remains at the present time; there are no letters containing them to be found among the papers in the University records, nor were any leaders or correspondence on the subject published in either the *Otago Daily Times* or the *Evening Star*, the local morning and evening papers. Rather, in a period of some recrimination, in December, 1876, when the medical school was thought to have proved a fiasco, it was held by the *Times* that the whole idea of the school had been "forced" by the Superintendent of the Province, in his desire to see a university of many faculties established; far from there being a public demand for the school, the number of those seeking a medical education was too small to justify its existence.

At this distance of time the school seems to have been undertaken to complete the original plan of the University, which, as has been said, was intended to grant degrees in Arts, *Medicine*, Law and Music. The few records still in existence bear out this view. It may be noted further that by the University of New Zealand Act of 1870 that body could confer degrees, *inter alia*, in Medicine, both after examination and *ad eundem*; in fact, as early as 1872 James Hector and Alexander Johnston were granted the degree of M.D. *ad eundem*.

In retrospect it is apparent that the foundation of the Medical School was a very rash undertaking with the resources available, however it may have been justified by the event. There was little grasp of what was required by the General Medical Council and the licensing bodies at Home, and between the inertia and lack of interest displayed by those bodies, the slow transport of mails at that time, the delay in improving the local standards and the presence of internal discord, the whole enterprise nearly broke down.

However, though Mr. Macandrew may have been unwise in starting the scheme, he undoubtedly saved it from ruin.

There is a vague statement that in 1871 a committee recommended classes in Law and Medicine. In this year the 10,000 acres in Southland were reserved for education by the Provincial Council, and the Superintendent contemplated the establishment of a Chair of Medicine and Anatomy therewith. In 1872 100,000 acres in the Waitaki District were

set apart for the University, and, as will be seen later, the Superintendent had a Medical School in mind when he made the grant.

In this year, 1872, a Select Committee of the Provincial Council was appointed, whose reference was to confer with the University Council on the expediency of setting up Law and Medicine classes in connection with the University. The persons on the committee were the Hon. Sir G. McLean, Dr. Webster (Chairman), Mr. Barton, and Mr. Macassey. They took evidence from Mr. John Hyde Harris, Dr. Webster, Professor J. G. Black, and Professor D. MacGregor (the last was a medical man).

Mr. Harris advocated medical classes. There were suitable young men in New Zealand who found it impracticable to go Home, and the medical profession was the only one closed to the colony, while the Church, the Law and engineering were all open. There was no apprenticeship to practising doctors, and no instruction in the hospitals. Evidently he regarded the establishment of a School of Medicine as a proper step in the development of the country.

The scarcity of openings for educated youth in the colony was a matter of some public concern at this period. Mr. Haughton, in a speech on the Education Bill in 1871, complained that the law was the only profession open to young men; he made, however, no mention of medicine.

At the Select Committee, Dr. Webster was clearly in favour of the plan. He held that the preliminary education in New Zealand was as good as that at Home (this turned out later to be an over-estimate). They had professors who could teach what are now called "intermediate subjects," chemistry and others, and practitioners who could teach the final subjects, and they had a hospital and a dispensary. A Professor of Anatomy and Physiology would be required, and a considerable expense must be incurred. He advised that if it was decided to import practitioners to teach the "final" subjects, their practice should be limited to their specialties.

Professor Black had no doubt that his lectures, on chemistry, would be recognised in the Home and colonial medical schools. He advocated that the full curriculum should be established, and if that was too much that two *anni medici* should be completed at Dunedin.

Professor MacGregor pertinently insisted that the instruction given in all subjects must be *recognised* instruction—that is, by the licensing bodies at Home, and that separate subjects would have to be taught by separate men. He advised them to aim at two *anni medici* only, with *recognised* teaching in chemistry, natural science, anatomy and physiology; the idea being that a man who had taken his first two years at Otago could go Home and enter a medical school there as a third year student, complete the final subjects and graduate from the British school with the British degree. The Scottish universities were what the members of committee had in mind.

Five medical practitioners in Dunedin—Drs. Hulme, Burns, Hocken, Deck, and Alexander—were asked to answer a questionnaire

on the following points: If the preliminary education was adequate and the teaching of the "intermediate" subjects practicable. What medical classes were essential. If the doctors then in practice could teach "Physic," Materia Medica, Pathology, Surgery, and Midwifery. If the Dunedin Hospital was adequate for clinical instruction. If an imported professor could teach Anatomy and Physiology and the other subjects named above. If practitioners could teach both "clinically" and "pathologically." If the asylum would be open for the instruction of students. If dispensary practice would be possible, and also instruction in dispensing. What would be the value of dresserships and house appointments. And also "Is a school advisable and practicable? If all the provisos were complied with, would it still be imperfect?"

The answers given to the technical questions are not now of importance, but on the final question it is worth noting that Dr. Burns thought the proposal "injudicious," and Drs. Hulme, Hocken, Deck, and Alexander all regarded it as premature.

The Select Committee, however, was of a different opinion, and their report, signed by Dr. Webster as chairman, contained the following: "In reference to establishing medical classes . . . provided the hospital was made available for the instruction of students, and a competent Professor of Anatomy and Physiology was obtained from Home, there would be little difficulty in affording a good and sound education, and in fitting students properly for the practice of the profession here, and it has every reason to believe that the degrees granted by this University would not be of an inferior character, or that the public would not benefit as much by the professional services of those obtaining them as by the same services now or hereafter to be afforded by medical practitioners educated elsewhere.

"In conclusion . . . while a good classical and mathematical education may be obtained in other parts of the colony, it is improbable that New Zealand will for many years to come be sufficiently populated to justify the establishment of more than one medical or legal school: and such schools being associated with the Otago University, your Committee cannot but think that they would be the means of securing from other parts of the colony a large number of students." (Prov. Council Records, *loc. cit.*)

The *Otago Daily Times* did not support the committee. It published an article on the endowment of the University with the aforesaid grant of land, which it approved. Discussing the functions of that body, it considered the University's first duty to be that of providing means to enable men to enter professions, and it looked forward to the secular education of ministers of religion and the granting of degrees to lawyers. It held, however, that the same did not hold good for degrees in medicine and surgery, which might for a time at least be put off. The hospital facilities were inadequate, and the writer generally decried the idea of general practitioners assisting a professor of medicine. He concluded: "It is to be hoped that lectures in medicine will for the present be indefinitely postponed."

A few months later, in a leading article on the Select Committee's report, the *Times* insisted that the scheme was premature, but gave some support to the two years' course advised by Professor Black; both he and Dr. MacGregor had advocated this limitation, but it received no emphasis in the committee's report. In the following year, 1873, while discussion was still in progress, the *Times* continued to regard the proposals as premature, advised great caution, and approved the two years' course only if it was certain to be recognised by the licensing bodies at Home. The neglect of this proviso was found to have very serious consequences in time to come. The attempt at a complete course was disapproved. A letter to the *Times* from "Paterfamilias" supported the two years' course, and this was the only letter published on the subject; indeed, there was complete apathy on the part of the public. Educational matters were freely discussed in the paper: the High Schools Board, the conflict between denominational and non-sectarian teaching, and so on produced numerous letters from "Disgusted," "Fiat Justitia," "One Who Knows," and the other employers of familiar *noms de plume*. But no one seemed to care in the least about the proposed school of medicine.

The Select Committee's report had been referred to a Committee of the University Council, consisting of the Vice-Chancellor, Dr. Burns, Mr. Chapman, and Dr. Hulme, in July, 1872, but by February, 1873, it had presented no report, and was discharged. The *Times* in the same month noted that the University Council appeared disposed, under certain circumstances, to regard favourably the establishment of classes in connection with Medicine, as recommended by the Provincial Council, but that they had resolved to seek further information. (This information, by the way, was hard to come by. The University of Melbourne had established a Medical School, and at a meeting in February, 1873, the Chancellor of Otago University undertook to ask for information from Melbourne; in the following July it was promised "without delay," and in November, 1874, a letter relating to the Medical Board was received. It was difficult to get much help from Melbourne, and not much easier to get it from England or Scotland.)

In July, 1873, a Monsieur Bessaco requested recognition as a teacher of French, and asked for the use of a room in the University building; the latter request was deferred until a decision had been made about a School of Medicine. This decision was taken before the end of the year. On November 20, 1873, the Superintendent of the Province wrote to the University Council about the formation of a Medical and Physiological School, associated with the Hospital and the Lunatic Asylum, and, as reported in the *Times* of December 4, 1873, a deputation of the University Council waited upon the Superintendent, and were instructed to take the necessary steps.

Accordingly, on December 9, 1873, the University Council resolved to select a Professor of Anatomy and Physiology in Great Britain. The appointment was to be advertised in the same way as those to the

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other chairs had been: the salary was to be £600 a year, with class fees, which was the same as the other professors received, and private practice was not to be permitted. This prohibition turned out to be important.

All this was embodied in the report to the Provincial Council on the University of Otago by the Chancellor. Classes were expected to begin in 1875, and it was noted that, according to that gentleman's expectation, the University of Edinburgh had agreed to recognize Professor Black's lectures on Chemistry.

When the University Calendar was first published in 1877 it is noted that the "University contains a Faculty of Arts, a *School* of Medicine, and a Faculty of Law."

The duty of obtaining a Professor of Anatomy and Physiology was entrusted to Messrs. Andrew and Auld, the University's agents in Edinburgh. Mr. Auld wrote on March 19, 1874, acknowledging the Vice-Chancellor's instructions, written on January 21, 1874. In April he wrote to say that he had had no applications but many enquiries as to the duties required and the facilities available in the appointment. He added that comment had been made on the prohibition of private practice, but on the whole this prohibition was approved. Later, Mr. Auld advised the Council not to debar their professor from the practice of surgery.

No one was to be appointed whose qualifications had not been previously approved by the Senate of his own university, and Mr. Auld assumed that the Otago Council would select their man and refer his name to the Senate of his own university. The Vice-Chancellor gave the required information as to facilities, and demanded that the candidates should possess "such qualifications as would entitle them to such recognition by the Senate of the Edinburgh University as we contemplate."

In May Mr. Auld again wrote to the Vice-Chancellor and enclosed copies of the testimonials of eighteen candidates; it was noted later that some of these were of a high order. Mr. Auld observed, and this may well have caused surprise, that few of the applications came from Scotland, so that he could obtain little direct information about the candidates. He drew particular attention to the names of F. F. M. Moir, of Aberdeen, who was preferred by some to all other candidates, and D. J. Cunningham, of Edinburgh, who was strongly supported by Sir Robert Christison, but was thought to be seeking an appointment at Home.

Cunningham, who was then unqualified, became a most celebrated anatomist, and held the chair of his subject both in Dublin and Edinburgh. He had two very distinguished sons, Admiral and General respectively, both of whom held important commands in the Middle East in the war of 1939.

ESTABLISHMENT OF MEDICAL SCHOOL

A copy of Cunningham's letter of application is preserved in the Department of Anatomy at Dunedin, and is as follows:—

To the
Council of the University of Otago.

The Manse of Crieff,
15th April, 1874.

Gentlemen,

I beg most respectfully to offer myself as a Candidate for the Chair of Anatomy and Physiology about to be instituted in the University of Otago.

I have just finished my Medical Curriculum in the University of Edinburgh, and, as my testimonials show, I was Medallist in the classes of Anatomy, Physiology, Practical Physiology, Materia Medica, and Senior Surgery.

During two sessions I acted as Assistant Demonstrator, under Professor Turner, when I had the best opportunities both of learning and teaching Anatomy. I am the author of an article in the "Journal of Anatomy and Physiology" on certain of the Nerves of the Head and Neck, and have since been conducting some investigations into the distribution of the Internal Laryngeal Nerve, and the relation of Nerves to Cartilage.

It is right I should state I have not yet graduated, but I hope to do so on the 1st of August. I am now twenty-four years of age.

Should you favour me with your confidence, and give me the appointment, I will do everything in my power to make the new chair worthy of its place in the University of Otago.

I am,
Gentlemen,

Your obedient servant,

(Signed) D. J. Cunningham.

The successful candidate was one Dr. Millen Coughtrey; his arrival in New Zealand and his subsequent election to the Chair of Anatomy and Physiology are of some interest. Dr. Coughtrey was a Lancashire man; he happened to be in the country at the time the appointment was advertised, and how this came about is indicated in the letter printed below. He arrived in Auckland in the emigrant ship *Chile*, of which he was surgeon superintendent, in December, 1873, and on his arrival he had the disagreeable experience of having to face two quite unsupported charges of improper treatment of patients on the voyage, a common enough experience of a ship's doctor in those days.

On seeing the advertisement, dated 21st January, 1874, of the Otago appointment, he very promptly addressed the following letter to Professor Black, which is preserved in the minute book of the University Council:—

Auckland, N.Z.,
January 28th, 1874.

Professor Black.

Dear Sir,

Enclosed is one of several introductions Professor Balfour gave me when he heard I was coming to New Zealand. (Not preserved with the letter.) Hearing there was likely to be a Chair of Anatomy and Physio-

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logy founded in your University, I telegraphed to you and feel much obliged for the reply.

'Tis quite possible I may be quite unknown to you and as possible that you do know something about me.

I graduated in Edinburgh University in 1871 with honours M.B., C.M. After that I was a Junior Demonstrator of Anatomy in the University, and pleased my students so much as to receive a testimonial from them. In 1872 I went abroad for my health, and visited the American universities and museums.

On my return I obtained a number of appointments in Liverpool. I undertook the whole of the Anatomical Department in the Liverpool Medical School, with exception of lectures. I obtained during the summer the largest class that had yet been there. I also lectured for the Liverpool School of Science, and was appointed out of many to lecture on Physiology for the free lectures supported by the Liverpool Corporation.

Owing partly to ill-health and impatient ambition I resigned my appointments there in July last (1873), and I then determined to proceed to New Zealand.

I am the author of several papers Anatomical, Zoological, and Archæological. Most of my work, however, was done for Professor Turner. I think I may, without stretching due modesty, state that I am well fitted for Anatomical teaching. I can not only use my scalpel, but the pencil and modeller's tool; indeed, I have made models of the brain and other organs during my studentship for Turner. Prior to graduation I devoted myself more to Anatomy, Physiology, and Pathology, and am thoroughly conversant with all museum and practical Anatomy work, either human or comparative.

I did not come to this country with a definite object of remaining here, since I have been offered and have agreed provisionally to take the Chair of Anatomy in a new university the State of Louisiana is founding, in which the curricula are to be like the Scotch and English and the teachers pure Scotch or English.

I would, however, prefer Otago, as I can honourably decline the Louisiana appointment.

Pray write to me and tell me if you think it would be worth my while to apply for the Dunedin chair. I have got no end of testimonials as to my power of teaching and my general Anatomical knowledge; they are what I got for Liverpool, but they are what I would use in the meantime in the event of my canvassing for the vacant chair in Dunedin.

I have the honour to be,

Yours faithfully,

(Signed) Millen Coughtrey.

Please address:

Care of Messrs. Cruickshank and Co.,
Auckland.

In addition to these qualifications Dr. Coughtrey appended the following to his name on his Introductory Address in 1875:—

Corresponding Member, Royal Physiological Society, Edinburgh;
Extraordinary Member, Royal Medical Society, Edinburgh;
Honorary Fellow, Historical Society, Lancashire and Cheshire;
Corresponding Member, Literary and Philosophical Society, Liverpool;
Recognised Lecturer in Anatomy in the University Courts of Glasgow,
Edinburgh, and Trinity College of Dublin.

Professor Black's reply was no doubt favourable, and Coughtrey, writing from Dunedin, sent to the Chancellor his letter of application for the chair and copies of his testimonials. (O.U. Cl. Cor.)

The appointment naturally could not be made until the applications from Home had been received and considered, and in the meantime (O.D.T., 8.5.74) Dr. Coughtrey was sent by the Provincial Government to Cromwell, in Central Otago, to report on an epidemic which had been prevalent in that district for three or four months. He reported very promptly that the township was "in a most deplorable sanitary state," and his views are embodied in a report of his address to the local Mayor and Corporation, in which he expressed himself with a force and an imputation of blame which gave considerable offence. He diagnosed the epidemic as typhoid fever, and attributed it directly to the gross state of neglect which he saw all around him; there was no sanitation beyond cesspools, and closets were often to be found above the level of the race which supplied the town with drinking water. His advice as to what should be done was good enough as far as it went, though naturally inadequate according to modern standards. (*Cromwell Argus*, 12.5.74.)

How Dr. Coughtrey came to be asked for this report, except as a medical man not in practice and so free to give the necessary time, is not apparent, but one would think that it did him some good. The *Otago Daily Times* (11.6.74) published a leader on his report, with very favourable comment, and it no doubt drew attention to the need for public health measures, and a little later the paper modified its opposition to the Medical School. In a leader on the University Report to the Provincial Council it referred to the proposed establishment of the School, to the hopes of having a Professor of Anatomy and Physiology in the following year, and to the recognition by Edinburgh University of Dr. Black's lectures.

The paper noted again the advantages of a two-years course with the following comment, in the tail of which is inserted a little venom: "We are aware that there are not a few young men amongst us who are anxious to take advantage of the opportunity of medical study . . . It is impossible to look at the medical men at present in our midst without agreeing that a little more competition—a little emulation—would be of advantage to the public. Probably, the profession would be the first to agree with us that young blood is wanted in the ranks." The *Times* was thus coming round to the view that the school was desirable, and once it was established it gave it for a time a fair measure of support, but it no more took and maintained any definite line than a weather-cock would have done.

As late as July, 1874, doubt existed as to whether the revenue from the 10,000 acres in Southland (reserved in 1871) was to be available for the University of Otago or not, for in that month the University Council found itself unable to proceed to the election of a Professor of Anatomy without assurance as to these reserves, and the following correspondence by telegram took place between Major

Richardson, the Chancellor, who was a member of the House of Representatives, and then in Wellington, and the Vice- Chancellor, Dr. Stuart, in Dunedin:—

Richardson, Government Buildings, to Stuart. 20th July, 1874.

All will work heartily and unanimously for Southland Reserves. When does election of professor come off?

J. Richardson.

Stuart to Richardson.

Election of professor will be delayed till Southland Reserves are secured to Otago. Members of Council in Wellington should vote for the professors in the event of the election being made before their return. Council expects that all should take part in a matter so important. There has been no voting on any of the candidates, nor will there be without due notice to all members. We cannot move without Southland Reserves.

D. M. Stuart, 21st July, 1874.

Doubtless these difficulties, which appear to-day as if they should never have arisen, were due to the affiliation of the University of Otago with that of New Zealand, since the former made over its reserves to the latter, and confusion in the allocation of funds, which Otago was ready for and found essential to its needs, had to be cleared up. The right of retention of their own funds by both Otago and Canterbury had not yet been established.

A month later, 17th August, 1874, the Southland reserves had been assured, and the election was to take place. The Council members in Wellington seem to have backed Coughtrey, and he was elected on 18th August.

On 24th August, 1874, Dr. Coughtrey was allowed six months' salary from September, and was granted £200 for the purchase of books and materials, which he thought too little by £100. He left in October to visit Europe, and to make arrangements with the Home authorities in the interests of the Otago Medical School. Drs. Hulme and Burns were to confer with him before he left as to the procedure necessary to obtain recognition of it by the General Medical Council and the licensing bodies. For reasons which will appear he failed to secure the recognition required.

Before leaving New Zealand Dr. Coughtrey communicated some of the local needs of the school to the Chancellor. He referred to these in an address which he gave many years later. They were, briefly: An Anatomy Act; Enlargement of the Matriculation Examination; Opening of the Hospital to the Profession and to Students, with the appointment of a Staff, and the development of Dispensary-practice and Pharmacy; Establishment of a two-years course until a complete one was practicable; Regulations regarding graduation in Medicine. To these he appended tabulated statements of the courses and examinations then approved in Great Britain.

He probably made further recommendations, since there is a memorandum from Major Richardson in which he thanked Dr. Coughtrey for his suggestions, and noted especially the need for an

Anatomy Act, a lecturer in Botany, and the appointment of clinical teachers. At the present time a sharp division exists between clinical and pre-clinical subjects, and no student begins serious clinical work until he has satisfied the examiners in Anatomy and Physiology. In the 'seventies this did not exist, and bedside instruction was required for students of Anatomy in their second year. The Chancellor referred all these matters to the Government.

Some difficulties in regard to anatomical study had been anticipated. Thus in a sub-leader in the *Otago Daily Times* as long before as 27th July, 1873, it was noted that the Professor of Anatomy at Melbourne was unable to obtain subjects for dissection, and "it might well happen that if an Anatomy Chair were established in Dunedin a whole session might pass without the attending students having had the opportunity of becoming practically acquainted with the various organs of the human frame. The professor at Melbourne reported that unless he got bodies it would be impossible to continue the study of Anatomy in that city, and that all the money that has been expended by the University authorities to create a Victorian School of Medicine will have been wasted."

An Anatomy Act was clearly needed and was soon put on the Statute Book, but too late for work in 1875, and a School of Anatomy was not authorised by the Governor in Council till 5th June, 1876.

The Anatomy Act of 1875 provides that the Governor in Council may authorise (and also revoke) the establishment of Schools of Anatomy in association with universities or Schools of Medicine. He may grant licenses to "practise anatomy" to legally qualified medical practitioners engaged in such schools. No one not licensed may be in possession of a "body." Executors of deceased persons who have possession of their bodies may permit anatomical examination, and this permission may be withheld under certain conditions. "Lawful possessors" of bodies are defined. No anatomy may be practised except in the specified places. Examinations are to be decently conducted, and the parts are to be properly buried. Rules for discipline are to be made and enforced by the authorities of the schools.

It is not clear when the decision was taken to limit the medical course at Otago to two years, but taken it was, and in a later report to the Provincial Council on the school the Chancellor noted that "The object aimed at was a two-years course of medical studies, which would be recognised at Home as *anni medici*," and the University Registrar announced in the *Otago Gazette* the opening of the session for 1875 with the following details;—

University of Otago. The Session for 1875 will open on Tuesday, 4th May . . .

Faculty of Medicine. In this Faculty lectures will be delivered during the Session on the following subjects, which will count for a *Medicus Annus* in the Medical Schools of the Home Country, viz. :—

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- I. Anatomy, general and descriptive, Anatomical Demonstrations, Practical Anatomy, and Anatomical Dissections. Professor Coughtrey, M.B., C.M.
- II. Chemistry, Theoretical and Practical. Professor Black, M.A., D.Sc.
- III. Natural History. Captain Hutton, F.G.S., C.M.Z.S.

The arrangements for the second year of the course will be published when complete.

W. H. Mansford, *Registrar*.

The arrangements for the second year included the very important one of appointing clinical teachers.

It may be noted that a *Faculty* of Medicine did not really exist at this time, and was not in fact established till 1891.

During Dr. Coughtrey's absence, in October, 1874, the Professorial Board, of which, of course, he was a member, was formed. He was by several years its youngest member, and may perhaps have found himself in rather formidable company. Sale was by this time forty-four years of age, with a first class in classics and a second in mathematics; he had been a Fellow of Trinity College, Cambridge, and Lecturer on Classics there, and he would have been on the short list for a chair in his subject anywhere in the English-speaking world, had he chosen to enter for it. Further, as a warden among the miners on the West Coast he had been known as "King Sale," a name he did not get for nothing. His was forceful personality. Black and Shand were both over forty. MacGregor was younger, at that time a little over thirty, but he had had a distinguished, indeed a highly distinguished, career at three Scottish universities, and he was a big man of commanding presence and great force of character. MacGregor afterwards took charge of the Asylum, and became successively Inspector of Lunatic Asylums and Institutions and Inspector of Hospitals. Coughtrey was only twenty-seven, and he had been but four years qualified, and had not been in practice during that time.

Dr. Coughtrey was expected to leave London on 26th January, 1875, on the ship *Carpathian*, for Melbourne. The *Otago Daily Times*, in March, understood that the negotiations which he undertook to carry out in the matter of medical examinations and classes had been, so far as he was able to judge, successfully completed. Unfortunately this was far from being the case. He was expected to arrive in time to open his classes on 4th May.

CHAPTER VI

1875 — 1876

RESIGNATION OF DR. COUGHTREY

MR. MACANDREW had wished to establish a Medical School, since there was none in the place, but naturally no one there had any experience of such things or knew anything about them. The difficulties were not slow in presenting themselves.

Dr. Coughtrey, who did know something about Medical Schools, had pointed out some of the requirements: the Anatomy Act, the higher standard of entrance examination, the admission to the Hospital and the appointment of a Hospital staff. None of these things could be accomplished by a stroke of the pen, and prompt action is not the distinguishing feature of government by committee. Consequently, when Coughtrey returned, after an absence of some eight months, nothing had been accomplished, the school could not be set going, and recriminations followed.

At Otago, people appear to have thought that the first year's work could be started and carried out with their existing staff and facilities, and that the necessary clinical teachers could be assembled before they were required for the second year. But things did not work out like that. The sanction of the Home authorities was not forthcoming, for their *vis inertiae* was extremely powerful, and they felt small concern about an embryo school at the other side of the world. So no beginning could be made.

Nominally, the Otago Medical School was started in 1875, but only nominally. In practice the whole of that year, and, indeed, of the next, were frittered away without visible result. In fact, only Mr. Macandrew's energy saved his pet child from disaster.

Dr. Coughtrey arrived back a little later than his prescribed date of 4th May, and on 31st May he delivered his introductory address.

In it he displayed no lack of that gift of self-assertion which no doubt in the circumstances he needed, and at the outset he avowed his love of plain speaking, and proposed to point out what he regarded as the defects and errors in the practice of medicine. In this address he displayed himself as a man a good deal in advance of his time, and he was probably regarded as a youngster full of new-fangled ideas; he showed a grasp of the recent improvements in medicine and in therapeutics due to chemistry, and an interest in graphic methods of recording physiological phenomena, and, what seems more remarkable for the period, a recognition of the "relations subsisting between mind

and body in their normal and morbid states." Further, he devoted a considerable part of his lecture to "public and sanitary medicine," with an advocacy of public health measures for the prevention of disease, which, one fancies, must have been rare in the 'seventies. The lecture was very well received.

The *Otago Daily Times*, in a leader (1.6.75), recognised in the new professor "one who will not hesitate to speak his mind, and who has a mind of his own which he may speak. If he can communicate to his pupils that sense of personal power which he gives to an audience, he will furnish them with a valuable weapon in their campaign, in which a certain faith in healer and healed is so necessary." And, noting Dr. Coughtrey's rather disputed statement that 40.8 per cent. of the hospital beds in New Zealand were in Dunedin, the comment was made: "Those who take a melancholy pleasure in declaring that it is altogether premature to establish a Medical School in our midst as yet will do well to notice this fact."

In June Dr. Coughtrey was called upon for a report to the University Council on the progress he had made towards obtaining recognition of the school. This he submitted on 19th June, 1875, and it was referred to a committee. Neither the report nor the committee's findings are now extant, but the report appears to have been unsatisfactory. One gathers that Coughtrey had been successful in gaining approval of his own lectures by Edinburgh and Glasgow Universities and by Trinity College, Dublin, though his written recognition as a lecturer whose lectures would qualify for graduates in Medicine in Edinburgh University, in terms of an Ordinance in the Scottish Universities Commissioners' Act, 1858, was only received in December, from Sir Robert Christison, Secretary of the Edinburgh University Court. But when he asked for recognition of the school it was refused on two grounds: First, because the standard of the entrance examination was too low, and, secondly, because no clinical teaching was provided. As has been seen, he had anticipated both of these objections, and had asked the University to take action, but it had failed to do so.

The General Medical Council, then, had declined to recognise the University Matriculation as adequate evidence of general education, and to meet their requirements a "medical preliminary examination" of a higher standard was introduced and was thereafter maintained.

In June, 1875, the Professorial Board resolved to recommend to the Council that the Medical Preliminary Examination should be distinct from Matriculation. Dr. MacGregor and Dr. Coughtrey were asked to make a draft of such subjects as would be suitable to secure acceptance at Home. Dr. Coughtrey also expounded the qualifications required in clinical lecturers, and he proposed amendments in the Medical Practitioners' Act so as to include the registration of students. It was decided that these points could be met by University regulations.

The Medical Preliminary Examination must have been introduced about this time. The candidates, who had to be sixteen years of age, were required to pass in six compulsory subjects—English, Arithmetic,

Algebra, Geometry, Latin, and Mechanics and Hydrostatics—and in two optional subjects chosen from Greek, French, German, Logic, Moral Philosophy, Higher Mathematics, Higher Natural Philosophy, Inorganic Chemistry, Botany, and Zoology.

The Otago authorities certainly did their best to meet the situation. The Professorial Board, the University Council, and the Superintendent of the Province all took action throughout June and July, and their chief attention was paid to the necessary changes at the Hospital and to obtaining recognition at Home.

The University authorities asked that the Hospital, which held more than the necessary number of 100 beds, and so had no need of extension, might be used for clinical teaching, that the wards should be divided into "medical" and "surgical," that the Dispensary should be adapted to teaching purposes, and that clinical teachers should be appointed. All this was to be ready for the second year of the course, it was not, they thought, required for the first. The Superintendent approved of these plans.

The *Times*, not at this time hostile to the school, published a leading article on the subject; the opening of the Hospital to the profession had been "warmly discussed." ". . . We venture to prophesy that when the Medical School becomes established . . . and it is known that in Dunedin, and in Dunedin alone, youths can commence their medical studies, a very rapid increase will take place, not only in the number of students attending this especial class, but also in others."

In the matter of recognition a long-range correspondence was started, with its inevitable delays. In June the Professorial Board instructed the University Registrar to write to the General Council of Medical Education and Registration in London for recognition of the new Medical Preliminary Examination, and also of "the various classes embraced in the medical curricula that will be in operation in this University on the 1st of May next (1876)," including Hospital practice.

In July the University Council found that it had not sufficient information to appoint lecturers in Medicine and Surgery without reference to the authorities at Home. The Registrar was instructed once again to expound to the General Council in London and to the University Court in Edinburgh the preliminary examination and the first-year course, and to ask what qualifications were necessary in teachers of clinical medicine and surgery for the recognition of the second-year course. The same questions must have been put to the licensing bodies and the other universities.

There was a long delay, and one feels that the dissatisfaction must have been extreme. Statements began to be made such as that "Dr. Coughtrey had been paid to go Home to get recognition, and had returned without it," and the *Times* took up the cudgels on his behalf and wrote about "undeserved opprobrium" and the "supineness of the University Council," while Dr. Coughtrey was not slow to defend

himself in print. In later days he declared roundly that he had been thwarted by the Council in their neglect of his original suggestions, that the Matriculation was not amended in time for the session of 1875, and not recognised till 1876, that the school was not proclaimed under the Anatomy Act till 1876, and that the Hospital was not utilised till late in the same year. "Had ordinary attention been paid to my first suggestions . . . I could have had in my first year . . . over twelve students . . . I have letters from these intending ones beside me."

The replies from the General Medical Council and the licensing bodies at Home were not received till 10th March, 1876, and they were referred to a committee of Drs. Hulme and Burns, who reported that the General Medical Council accepted the preliminary examination, and that the University of Glasgow accepted two *anni medici* on condition of individual teachers being recognised by its Medical Faculty. But the other bodies, when they expressed any opinion at all, considered the University of Otago too immature for recognition.

The Chancellor embodied this in his report to the Superintendent of the Province for the academic year 1875-6. He proceeded: "I regret to inform Your Honour that the Council met with greater difficulty in placing the Medical School on a satisfactory basis than had been anticipated." He described how the Council had received only vague replies to its communications, the objections being to the want of a Royal Charter and to the immaturity of the scheme. The Medical Preliminary Examination had been accepted, and Glasgow had given "something like assurance" that with clinical teaching in the Hospital and attendance at lectures given by the Professors of Chemistry and Anatomy a two-years course would be recognised.

However, Otago anticipated that a Royal Charter would be granted to the University of New Zealand, which would overcome one of the objections, and it also looked for an increase in its funds, and it had determined to proceed with the school. To this end it had set up a committee to enquire as to the number of teachers that would be necessary, what should be their qualifications, and what expense would be involved. Meanwhile, two clinical lecturers had been appointed, subject to their recognition as teachers by their respective universities or colleges. It was anticipated that the school would be recognised when these arrangements were completed.

The replies received by the University to the enquiries it had made of the medical authorities at Home may be briefly summarized:—

The General Medical Council recognized the Medical Preliminary Examination, but had no authority as to the curriculum, which was the affair of the licensing bodies.

The Royal College of Physicians of London referred the matter to its Council.

The Royal College of Surgeons of England regarded the project as immature.

The Society of Apothecaries objected that the school was not in existence.

Of the universities, Edinburgh objected that the University of Otago was not a "Colonial University," so that its Arts courses could not be recognised for the Medical Preliminary Examination. Its lecturers could not be recognised as a body, but only as individuals, pending the grant of a Royal Charter, and in any case, with certain exceptions, lecturers would not be recognized in more than one subject.

Glasgow, which gave the most favourable reply, required two clinical lecturers, on medicine and surgery, who must obtain recognition from Glasgow University. The first *annus medicus* required attendance at classes in Anatomy and Chemistry, each of one hundred lectures; the second required attendance at the medical and surgical practice of a general hospital of at least eighty beds, and instruction in practical anatomy through a winter session of six months.

Trinity College, Dublin, forwarded its regulations. Durham laid the application before the Senate. London University referred it to a committee. Aberdeen regarded it as *ultra vires*. Cambridge would give no recognition till the classes were established. Oxford pointed out that residence and an Arts degree were required before a degree in Medicine could be granted by it.

The whole scheme was on the horns of a dilemma; recognition could not be given to a school that did not exist, and a school could not discharge its functions until it was recognised.

It must all have been very disheartening. Major Sir John Richardson, a former Chancellor, took occasion to write to Dr. Stuart in June, 1876: "I am aware that the Provincial Council gave the Benmore endowment on the representation that the Council would erect a Medical Faculty in the University. This, I think, occurred in my absence. I protested that we were unable to meet fully and fairly our existing liabilities, but, finding the engagement irrevocable, I consented, and when the applications for the first appointment were received and when in my opinion justice demanded that an election should take place, I gave a hearty vote in favour of Dr. Coughtrey."

In his report to the Superintendent the Chancellor reported that there had been four students of Anatomy. Who these were, or what they were taught or could have been taught, is not recorded; the preliminary examination was not yet recognised, nor was there any "school of anatomy."

And so ended a quite futile year for the Medical School.

Nevertheless, and it shows considerable courage, the University Council proceeded to complete the arrangements for their Medical School.

In 1876 the first two students were recorded as having passed the preliminary examination; these were Saul Solomon and Charles Low. They probably sat for it in 1875, but it was not then recognized. Mr. Solomon gave up medicine for the law, took silk, and in time became Crown Prosecutor. Mr. Low was the "one student" to whom later

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on Dr. Coughtrey regretfully referred. The registration of medical students was arranged about this time.

A Committee of the University Council was appointed to consider what staff would be necessary to complete the *proposed* Medical School, so little had by that time come of it. The committee reported on 21st April, 1876, having taken evidence from Professors MacGregor and Coughtrey and Drs. Alexander, Gillies, Blair, and Hocken. All, with the exception of Dr. Coughtrey, thought that a staff of from five to seven teachers, in addition to those already appointed, would be sufficient, and would make up a staff similar to that at Melbourne University.

It seemed, then, that a staff of some eight teachers was required at once, and it was realized that as time went on it would be necessary to increase the range of subjects and to subdivide them, which would need an increase in staff. The committee thought that there were sufficient teachers for Chemistry and for Anatomy or Physiology, or perhaps one man could teach both, as in Melbourne, but teachers of Medicine and Surgery were required, and clinical lectures must be given. The question was asked whether the lecturers need be *Fellows* of their respective colleges, or whether membership would be adequate for this purpose. It was held that Members might be appointed, provided that they obtained the recognition of their own corporations at Home; it was therefore incumbent on them to obtain this for themselves. The staff was thought to be now sufficient for a first year's course, and when teachers in Medicine and Surgery were recognized there would be enough for the second.

Coughtrey apparently put in a minority report on the staff required, which was conceived on a much more ambitious scale. He asked for four professors—of anatomy, physiology, chemistry, and pathology—nine lecturers, and two tutors (in vaccination and pharmacy). This report seems to have been ignored.

It was hoped to achieve all this by May, 1877, after which the Council gallantly anticipated the institution of a complete course, as soon as funds would permit. They proposed to advise the University of New Zealand of the commencement of the Medical School and of their intention to complete it. This, it was hoped and believed, would strengthen the application of the University of New Zealand for a Royal Charter.

It was stated that the Council was providing for one hundred medical students in the new University building, and on 8th June, 1876, Professor Shand, Chairman of the Professorial Board, had estimated the rooms which would be required for teaching therein. He put down for Anatomy a dissecting-room 36 feet by 22 feet, an anatomical specimen room, a physiological laboratory, a retiring room, and a large cellar, and had further advised that the Chemistry and Anatomy Departments should be detached from the main building. It is doubtful if these recommendations were carried out.



William Boughton

Meanwhile, the University Council did its best to cope with its numerous difficulties, a good many of which had to do with the clinical lecturers. It will be recalled that as early as 23rd July, 1875, the Registrar had written Home to ask what qualifications were required in these officers. A year later the Council reported to the Provincial Government that they had received no satisfactory information; when it arrived six months later still, the Royal College of Surgeons refused to recognise the clinical lecturers, as the school and its staff were incomplete.

However, the Provincial Government had instituted the proposed arrangements at Dunedin Hospital, Dr. Hulme had been made Controller, Dr. Hocken had charge of the surgical and Drs. A. J. Fergusson and W. Brown of the medical cases. (O.U. Cl. Mins., 15.9.75.)

Early in 1876 the University Council decided to proceed to the election of clinical lecturers, and asked Dr. Hulme to ascertain whether the Hospital would be open to them. Dr. Hocken was elected for the surgical lectures and Dr. John Gillies for the medical; the latter appointment aroused much criticism. These officers were required to obtain for themselves the recognition of their own colleges and of Glasgow University. The appointments were annual and the salary £100 a year. As stated above, the Royal College of Surgeons would not recognize these lecturers.

It may be asked how Dr. Coughtrey, the only acknowledged member of the staff of the Medical School, occupied himself during this barren period, and what delights he can have found to pass away the time. To some extent, at any rate, he was "made for sportive tricks," and appears to have enjoyed addressing a lay audience.

On 19th August, 1875, the *Times* announced: "We note that Dr. Coughtrey is to lecture . . . on the 'Organ of Hearing.' It affords us much gratification to hear of a professor coming out of his shell in this direction." The paper made favourable comment on the lecture after its delivery.

A complaint was afterwards made by the *Times* that the public never heard a word about what the University Council was doing, and that the latter was thereby losing popularity. (O.D.T., 5.5.76.) Coughtrey may have realized this and have been trying to counteract it. In the following January he delivered the first of a series of popular lectures on Anatomy and Physiology, given with the approval of the University Council, which was "instructive and interesting," with a further favourable comment in the *Times* on his advocacy of cooking classes and a knowledge of diet. The first lecture was delivered "in a most pleasing, conversational style." Evidently the professor was popular with the public.

Later in the year he was advertised to give a popular lecture on "The Brain and Organs of Sense"; also, law students were allowed to attend his lectures on "Medical Jurisprudence." Of a conversazione at the Institute we learn that "a great deal of the success was due to

Professor Coughtrey, who did his best to contribute towards the entertainment."

But whatever the public, as represented by the *Otago Daily Times*, thought of Professor Coughtrey, it thought very little of the Medical School. At the time when a school in Christchurch was mooted, the paper suggested that there had been omission of "ascertaining what chances of success there would be in the event of a Medical School being established . . . The possession of a large land endowment and one medical professor is not a sufficient reason for founding a School of Medicine. The proposal to give students two years of study here . . . appears to be a total failure at present. There was at first an air of feasibility about it . . . but it is clear that the difficulties . . . were not foreseen." (O.D.T., 7.6.76.) Six months later, when Dr. Coughtrey resigned, the paper dismissed the school as a fiasco; £3,000 had been spent and it was costing £2,000 a year. There was one student for the two years course, and nothing had come of it.

What Dr. Coughtrey did with his one student is not now to be found recorded. He had a class-room in the old University buildings, and Dr. Hulme provided him with the body of a suicide. In April, 1876, and again in September, he asked for a Dissecting-room Porter, but no salary was paid to any such servant till 1877; it would be hard to do much practical anatomy without one. With the second application he observed that the General Government had arranged Inspectors of Anatomy, and that he expected to commence human dissection within fourteen days.

It will be recalled that Dr. Coughtrey was not allowed by the terms of his appointment to undertake private practice, but within six months of his arrival, in October, 1875, the University Council was informed that he was so practising. When questioned, Dr. Coughtrey replied that he was not "in practice," and did not consider himself debarred from seeing cases in consultation. His letter was accepted, the matter was discussed, and he was advised that consulting practice was not permitted him, in spite of some appeal by the Superintendent. Apparently Dr. Coughtrey decided to put his own interpretation on the terms of his appointment, and continued to see cases in consultation.

In the following year Coughtrey circularized the profession to propose the formation of a New Zealand Medical Society, which was to be open to the whole country, with a branch in each important city, and an annual meeting was to "migrate from city to city," after the manner of the British Medical Association. It was to serve "clinical, ethical, and political purposes." He also advocated the foundation of a medical journal.

He called a meeting for the formation of a local branch, which was held on 28th June, 1876, and the society was formed. The following officers were elected:—President, Dr. Hocken; Vice-Presidents, Drs. Richardson and Drysdale; Treasurer, Dr. Fergusson; Secretary, Dr. Coughtrey; Committee, Drs. Brown, Batchelor, and Gillies. There were also present at the meeting Drs. MacGregor, Copland, Sorby,

McBrearty, Martin, Thompson, Murphy, Alexander, Reimer, Niven, and Deck. It was noted that there were 270 practitioners and 50 other medical men in New Zealand at that time.

It is surprising to learn that just six months later the President of this New Zealand Medical Association, of which Coughtrey was secretary and virtual founder, forwarded to the University Council an enquiry whether the Professor of Anatomy practised medicine with its knowledge and consent. It appears that the Association had discussed the matter in Coughtrey's presence, and that he had, not unnaturally, promptly resigned from it.

The University Registrar forwarded to Dr. Hocken the correspondence which the Council had had with Dr. Coughtrey on the subject of practice, at which the latter took violent offence. He wrote to say that he regarded it as a grave charge against him and that his usefulness as a teacher was impaired. The charge must be withdrawn or his resignation accepted, though he was willing to stay on till his successor was appointed. He claimed the right to interpret his agreement in his own way. He complained that he had been thwarted in many of his efforts to found a Medical School.

When Dr. Coughtrey's letter came before the Council it was naturally discussed at some length. That body disagreed entirely with the statement about "thwarting," and said that the professor had received every consideration. Both the medical men on the Council displayed marked hostility to him throughout the discussion. His resignation was accepted and his offer of further service declined.

It is to be remarked that none of this controversy came before the Professorial Board at any time, although it so closely concerned one of the members thereof.

Dr. Coughtrey thus resigned his appointment little more than two years after his election, as the result of an appeal against his conduct by members of the professional association which he had brought into existence, and of which he was the secretary. There can hardly have been anything but a strong antagonism between him and the profession and also between him and the University.

However, as has been seen, he was well received by the public. He entered private practice, in which he was highly successful, and built a house opposite Knox Church, in George Street, in which his children were born. A good many of his patients remembered him very kindly as long as thirty years after his death. He had the reputation of being devoted to his practice and a good surgeon. A nurse of his time at the Hospital remarked that he got on well with the nursing staff, was fair and direct, and "told you what he wanted done." In later years he built a house intended for a private hospital at St. Clair, at the other end of the city, and took rooms in town where he practised as a consulting surgeon, but with less success than as a general practitioner.

His breach with the University must ultimately have been healed, since he delivered the above-quoted Graduation Address in 1887, when

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the degrees of M.B. and LL.D. were first conferred by the University of New Zealand, though his references to the Otago University Council of his day were scarcely couched in parliamentary language.

One gets the impression of a bluff personality, not without vanity and fond of display, of a man with something of a "waltzing gait" and full of chaff. He was a good horseman, and showed to advantage on horseback, and had sufficient knowledge of the subject to act as judge of the hackneys at the Christchurch shows. At one time he kept racehorses, and ran "Coupon" and "Brenda" in the name of "George Onslow."

He was a keen volunteer, and was Medical Officer to the Otago Hussars, afterwards the Otago Mounted Rifles, and held the rank of surgeon-major. He was a good disciplinarian, always on time, meticulous in all his duties, and took pains with his ambulance lectures and first-aid instruction. Some old members of the Corps long remembered a day when, in the absence of the combatant officers, Coughtrey led the squadron mounted on a blood horse. He gave the commands: "Walk; Trot; Canter!" and the sound of the hoofs behind him sent his horse off at a gallop. The comment was: "If we hadn't pulled up, I think he would have been galloping still!"

He was interested in football, and was associated with the Zingari-Richmond Club in Dunedin from the early 'eighties to the 'nineties, and was often president. He was on the Committee of the Otago Rugby Union, founded in 1881, for ten years, from 1883-92, and was president from '87 to '90. A visiting player of the period could recall him as presiding at the dinner after the match, and speaking after it in an unmistakably "English" voice, a sound not always popular with New Zealand football audiences, and that he was very well received.

He was long spoken of as a most public-spirited person, who carried great weight, and gave attention to anything which seemed to be of real value; his chief public activity was on the Drainage Board, of which he was Vice-Chairman.

He died in 1908, in his sixty-first year.

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CHAPTER VII

1877 — 1884

THE TWO YEARS COURSE

DR. SCOTT

At the end of 1876 conditions in the Medical School were as unsatisfactory as they well could be. Its establishment had been undertaken against the advice of the local doctors, with whom the Chancellor of the University had privately agreed; the proper steps to gain recognition had not been taken, and there were continual delays and misunderstandings and calls for explanation which occupied months and years. A professor had been appointed, with one student to teach; he found that his recommendations had not been carried out, and that his *bona fides* was questioned, and he had retired in disgust. In the opinion of the public, as expressed in the newspapers, the whole thing was a fiasco, and nobody wanted it.

Thus the *Otago Daily Times* (8.1.77), minimising the value of the whole University, wrote as follows of a proposal to make it residential when the new buildings were under consideration: "The Council might now—assuming that they do not continue their project of a Medical School—make the attempt to form the best classical and general school in New Zealand. Let them throw all their university ideas away, construct a building suitable for the purposes of a school with residences for masters and boys"—or—"we shall continue to see a splendid endowment frittered away in impossible conceptions, such as preparing accommodation for a hundred medical students when there is but one, as stated by the Vice-Chancellor at the last meeting of the Council."

However, Mr. Macandrew, the Superintendent of the Province, to whose private ambitions the premature launch of the school was rather thought to be due, expressed himself thus in a letter to the then Chancellor in an attempt to save the resignation of Dr. Coughtrey (20.12.76): "... a Medical School in connection with the University. I look upon such a school as being quite attainable, and, in fact, as holding out in many respects the greatest practicable benefit to the people of New Zealand which could at the moment accrue from the University."

And in 1877 a new period began under a new professor, during which only two *anni medici* were attempted; this continued till 1884, and instruction in the full course began in 1885.

At the beginning of 1877 things were so doubtful that the Registrar of the University of New Zealand wrote to the Otago University Council to enquire if any steps, and if so what, had been taken by that body towards the establishment of a Chair of Medicine. No copy of the

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reply seems to have been preserved, but the following resolution, slightly amended in the course of debate, was moved in the University Council by Mr. Macandrew and passed on 13th February, 1877:—

While regretting the efforts which have hitherto been made towards the establishment of a Medical School have not proved so successful as might have been anticipated, this Council is of opinion that it is desirable to proceed to the establishment of such a school.

This Council is further of opinion that though possibly the establishment of such a school may not at the outset offer means of a complete professional training which would be recognized as such by the Medical Schools at Home, it will nevertheless go far towards such and be a great boon to those in the Colony who may be desirous of qualifying themselves for the medical profession.

Resolved, therefore, that a Committee be appointed with full power to give effect to the foregoing resolution, such Committee to consist of the Chancellor, Vice-Chancellor, and Dr. Burns.

A few days later the following cable was despatched:—

Dunedin, 15.2.77. To Auld, Otago Office, Edinburgh.

Engage Anatomical Professor terms and conditions as before. Cunningham preferred. Wanted here first May. Advise engagement whereupon funds wired. (Signed) Chapman, Chancellor.

One can hardly think that the facts of the case, as stated at the beginning of this chapter, were made plain to intending candidates. And yet surely they ought to have been; if they had, it is not likely that the following statement could have been issued by the Selection Committee:—

6 Eton Terrace, Edinburgh,

24th March, 1877.

We have examined the testimonials of the twenty-five candidates for the Chair of Anatomy and Physiology in the University of Otago. We desired to express our satisfaction at having had submitted to us testimonials from so many candidates whose qualifications entitled them to apply for such an office, for no fewer than six of these gentlemen have been or are engaged in teaching one or other of the subjects embraced in the chair. After a comparative examination of the qualifications of these candidates we have formed the opinion that Mr. J. Halliday Scott, M.B., C.M., Demonstrator of Anatomy in the University of Edinburgh, is the one who in our judgment has the strongest claims for the appointment. The grounds on which we base this opinion are his distinguished career as a student, the experience he has acquired since his graduation in the methods of anatomical work and teaching, and the high testimony which is borne to his personal character.

(Signed) Wm. Turner, M.B.,

Professor of Anatomy in the University of Edinburgh.

John G. McKendrick, M.D.,

Professor of Physiology in the University of Glasgow.

Could twenty-five such persons have been found ready to take this appointment had they known the facts? It is an instance, often repeated, of the failure to indicate and failure to comprehend the conditions which prevail in far separated places. However, there can be no doubt that Dr. Scott made a great success of the appointment.

Scott signed an agreement with Messrs. Andrew and Auld to be Professor of Anatomy and Physiology, with the necessary and customary duties, subject to the rules, regulations, and instructions of the Otago University Council, or party authorised by them, at a salary of £600 per annum from the date of sailing, with fees of £3 3s. per student for a six-months' term (fees were subject to certain variations), and during good behaviour; he was to provide a substitute during incapacity. The appointment was "whole time," and no private practice, consulting or other, was allowed. He was to sail by P. and O. steamer on 3rd May, but he was afterwards allowed to postpone his departure till 31st May, and he arrived in New Zealand on the *Ringarooma* on 31st July.

John Halliday Scott was certainly a man who made the best of things. The son of a Writer to the Signet, he was born in 1851, and was thus twenty-six years of age at the time of his appointment; he was then M.B., C.M. (Edin.), and M.R.C.S. (Eng.), but in that year he took his M.D., and was awarded the gold medal; later he became F.R.S. (Edin.). (Australasian Medical Directory.) He was, of course, a member of the Professorial Board, of which he became Chairman in 1880 (this appointment was held by all members of the Board in rotation for one year). He promptly took very complete charge of the Department of Medicine; if one asked any old member of the staff how things were done the reply was always, "Scott arranged everything."

It may be doubted if Professor Shand's advice, noted in last chapter, as to the accommodation required in the new University buildings for Anatomy and Physiology had been adopted, for just before Scott's arrival Professor Hutton pointed out that it was inadequate, and that in addition to his lecture and dissecting rooms he would need a "preparation room," at least 16 feet by 14 feet. He probably was not given even so much, for in an obituary notice, written many years later, it is remarked that "Dr. Scott, in his earlier years, had little more than a small dissecting room, museum, and a cellar for subjects."

One can hardly believe that Dr. Scott was satisfied with what he found, but he has left only one record to the contrary. Early in 1879, after about a year and a-half of service, he wrote to the Council alleging that he had been promised a house, and asking for either an allowance in lieu, for house rent, or permission to practise. The Council denied any such promise, which is certainly not to be found in their agreement, and refused leave to practise, which was as certainly prohibited.

Otago had from the first had very close association with Edinburgh, as is implicit in the choice of "Dunedin" for the name of its chief town. Here and there among the earlier papers of the Medical School references are not infrequent to "recognition by Edinburgh," although the University there had not been particularly encouraging to the advances of Otago, less so indeed than was the University of Glasgow. However, after Scott's arrival, direct from an Edinburgh appointment, a change became apparent, and though it is nowhere stated in so many words, there can be little doubt that his personal influence secured recognition there, and it became an established practice for New Zealanders either to take their whole course at Edinburgh or to go there to complete their studies after two years at Otago.

There is a note by Scott among the University's correspondence papers of 1880, though undated, to this effect: "The lectures (in Otago) are recognised in Edinburgh as equivalent. A student can take two years of his medical course . . . and may complete his studies in two years more in Scotland." Later, when the curriculum was completed, a resolution by the University Council contained the words ". . . a two years' course which has been recognised by the University of Edinburgh and other medical schools."

Doubts and difficulties with regard to the Medical Preliminary Examination still continued: the General Medical Council was supposed to have recognized it by March, 1876, and in August there is a note in the University correspondence of a revised syllabus for it. Several candidates were recorded as having passed it, but on 12th December, 1877, the *Otago Daily Times* stated that the General Medical Council had not yet recognized this examination here, but that it would be considered by that body at the earliest possible moment; the Chancellor and Dr. Burns were to take steps to protect the students who had gone Home.

Already (8.11.77) the Registrar of the General Medical Council had stated that Otago should be included in the list of schools recognised by his Council and thenceforward notices of all changes in the regulations were sent there, but even as late as 1884 Dr. Burns wrote to the University Registrar: "Re Preliminary—tell the Chancellor nothing for it but address Registrar of General Medical Council that we accepted Dr. Hawkins' letter as ample authority for assuming that his Council would endorse the Committee's recommendation and are honestly surprised to find our school omitted from the published lists." No further correspondence is to be found, and it may be assumed that this omission was no more than an oversight, but it indicates the insecurity which must have been felt.

Candidates were certainly recorded as having passed. As mentioned earlier, there were in 1875 Saul Solomon (who withdrew) and Charles Low; in September of that year it is noted that no summer session would be held, and no preliminary examination, apparently because the Council had omitted to advertise it. At any rate, no one passed in 1876. In 1877 W. J. Will and J. A. J. Murray passed; in

1878, H. McAndrew and J. Closs; in 1879, J. Cunninghame and J. McPherson; G. Montgomery, B.A., was excused; in 1880, W. McLean, T. Bell, R. C. Strode, F. W. Mackenzie; in 1881, J. Brodie, F. H. Jeffcoat; in 1882, W. Flemming, W. Allan, W. Christie, P. A. Lindsay "qualified for registration as medical students." Christie was the first student to qualify as a doctor in New Zealand. In this year the names of D. Smith, E. J. Roberts, and — Neil occur in class lists, without any record of passing the Medical Preliminary Examination. In 1883 fresh names are those of L. E. Barnett, E. H. Colbeck, J. Somerville, — Johnstone, C. Little, and J. Burns; and in 1884 those of R. V. Fulton, J. C. Palmer, J. Sutherland, F. J. Nicoll, W. G. Cattan, N. G. Trotter, W. A. Chapple, W. J. Mullin, and H. C. Barclay.

In 1877 the University of Otago issued a brochure, which in later years was developed into the University Calendar. It must have been published early in the year, for in the list of chairs that of Anatomy and Physiology was marked "Vacant." The University was said to contain a School of Medicine, and the following detail was given about it:—

The course of lectures in the Faculty of Arts prepares for the preliminary examinations in Medicine . . . The Medical School provides lectures in chemistry, biology, and anatomy by the professors of these branches, and also clinical lectures in medicine and surgery. It is the intention of the Council . . . to establish additional lectureships, so as to offer a complete course in Medicine, qualifying for medical degrees in the University of New Zealand. The arrangements already made cover the first two years in the medical curriculum. Several of the professors and lecturers have already been recognized by the medical authorities at Home, so that attendance upon their lectures will count as attendance on the same subjects in the Home schools, and the recognition of the others is expected to be received within a few months. Students of medicine will thus have the privilege of attending classes here for two years, and then, if they desire it, of proceeding to complete the course and to graduate at one of the schools of the United Kingdom.

The clinical lectures in connection with the Medical School will be given in the Dunedin Hospital, which is the largest in New Zealand. The Hospital building is not only commodious, but of ample extent, and with outbuildings and grounds occupies a self-contained block in a central but open and airy situation. It contains 198 beds, and the average number of indoor patients is 170. Of these about 100 are under medical and about 70 under surgical treatment, and both in medicine and surgery the variety of cases occurring is amply sufficient for the purposes of efficient instruction.

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It should be noted that only the *courses* were recognized. Students might have learnt their chemistry and anatomy at Otago, but they had to demonstrate the fact in the examination hall in Edinburgh.

In greater detail, the following is from the University Calendar. A synopsis of Medical classes was drawn up:—

Anatomy lectures five days a week, illustrated by dissections, diagrams, models, casts, and microscopic specimens.

Demonstrations from dissections, five days a week.

Practical Anatomy: The dissecting-room open from 9 to 4, the professor attending four hours daily.

Chemistry, Zoology, and Botany: The course given for Arts by Professor Black and Captain Hutton.

Clinical lectures twice weekly, and bedside instruction during visiting hours.

Dr. Brown's course consisted of:—

Lectures in Surgery, five days a week.

Operations on the cadaver, bandaging, surgical appliances, with the use of pathological specimens, diagrams, preparations, and casts.

In 1880 a Medical Scholarship of £100 a year for three years was awarded at the Senior Scholarship Examination, in Anatomy, Physiology, Zoology, Botany, and Chemistry. It was open to students of at least two years standing, who intended to proceed to a degree in Medicine. A Medical Scholarship was awarded to G. Montgomery, B.A., in 1879, but this is the only record of any such award.

In 1883 the examinations for the whole course were specified:—

1. In Chemistry and Anatomy (after two years).
2. In Physiology, Pathology, and Materia Medica (after three years).
3. In Surgery and Clinical Surgery, Medicine and Clinical Medicine, including Therapeutics and Insanity, Midwifery, Diseases of Women, Medical Jurisprudence, and Public Health.

Early in 1877 Captain Hutton, F.R.S., was elected to the Chair of Natural Science, and he wrote to Edinburgh to obtain recognition of his lectures for the medical course, which was no doubt given, though there is now no record of the fact. At the end of 1878, nearly two years later, the lectures were recognized by the Royal College of Surgeons of England.

An example of the exasperating delay involved in negotiation with the Home authorities is to be found in the matter of the clinical lecturers in medicine and surgery. Drs. Hocken and Gillies were appointed in 1876, and accepted their appointments in June, but in

December the Council was informed that they would not be recognized by the Royal College of Surgeons, which at least had the grace to apologize for the delay. They were, however, recognized by the University of Glasgow in March, 1877, and Gillies was recognized by Aberdeen. At the end of this year it was decided to dispense with the services of these lecturers, Dr. Hocken to receive nine months salary.

In November, 1877, the members of the Otago Medical Association—that is, the Otago Branch of the New Zealand Medical Association—on the completion of the Medical School, indicated to the University Council that they desired greater representation of the medical profession on the Councils of the Universities of New Zealand and Otago. In reply the Council advised the Association that the appointments were not in the hands of the Council, but promised, in the event of a vacancy, to convey this desire to the Governor. In the following year a vacancy occurred, the Council advised the Association and instructed that body to confer with the Governor; the Association recommended Dr. Robert Borrowes for the Council, and he was appointed.

In December, 1877, it was recorded that the following had been appointed to the honorary staff of Dunedin Hospital:—Drs. Borrowes, Brown, Wilkins, Blair, Coughtrey, Batchelor, de Zouche, and Maunsell. (O.D.T.)

In 1878 the Secretary of the Hospital Committee advised the University Council that students would be admitted to the Hospital, and that the staff would afford facilities for their instruction. The Council then decided to appoint a lecturer on Surgery, at a salary of £200 a year and fees, on terms and conditions laid down by Dr. Scott. Dr. Burns objected on the ground that the salary was insufficient, but Dr. William Brown was appointed for three years from May, 1878, conditionally on obtaining recognition from the Edinburgh University Court. Some correspondence took place, and Brown was not recognized till August, 1879, more than a year after his election.

All who remembered Dr. Brown fifty years after he flourished in Dunedin spoke of him as an excellent general practitioner and a sound surgeon and teacher of surgery, up to his required standard. At least one instance of his generosity is known, when he paid for the medical education of the son of a friend who had died and left insufficient means for the purpose.

In 1879 Dr. Scott put it to the Council that the Hospital fees for students—£10 for the first year and £5 for the second—were too high and likely to ruin the school. A committee was appointed to confer with the Hospital Committee, which in the following year met Scott's views to some extent, the fees being reduced to £7 and £5. Scott and Brown were made members of the honorary staff.

At the end of 1879 Captain Hutton resigned his chair, and the Council referred to the Professorial Board the questions of what designation of the vacant chair and what subjects to be taught by its

incumbent would render it most useful to the Medical School. The Board recommended that the title of the incumbent of the chair should be "Professor of Biology and Curator of the Museum," and that the duties should be to teach Zoology and, if possible, Botany, both to include Palæontology. The Board further recommended that Professors Huxley and Wyville Thomson should be associated with the Agent General for New Zealand (no longer with the Otago agents in Edinburgh) in the selection of the person. The Council did not call upon the Agent General, but left the selection to the two professors named, with Dr. Carpenter. In 1880 they selected Dr. T. Jeffery Parker, later F.R.S., a most fortunate choice.

During 1880 the Professorial Board took occasion to point out to the Council that the examiners in Anatomy and Physiology appointed by the Chancellor of the University of New Zealand "were neither experts nor had ever taught the subjects."

The Professorial Board minutes of 1881 record that Dr. Scott would lecture on the Elements of Physiology throughout the session, and during that year he was asked to give some lectures on that subject to teachers, but indicated that he could not do so without a grant of £50 for apparatus. This money was granted, and the lectures were given. Scott was noted in the University Calendar of 1882 as lecturing in Physiology. In 1881 he had obtained a grant of £20 for the Anatomical Museum.

In the Otago University correspondence files for 1881 there appears the following important letter from Scott. It is remarkable that it did not reach the Council through the Professorial Board, but it is not to be supposed that it arrived "out of the blue," informal discussions must surely have taken place:—

University of Otago,
4th October, 1881.

Gentlemen,

As I understand it is your intention to complete the Medical School at an early date, I write to remind you that the necessary preliminary arrangements will occupy some considerable time. It would be well to have a scheme drawn up as soon as possible, so that it may be thoroughly discussed by yourselves, as well as by the New Zealand University Senate at its next meeting.

At present, looking to the probable numbers of students, I cannot recommend you to found all at once a thoroughly equipped school. I would rather dissuade you from doing so. The results would not justify the expenditure.

The following plan, which I offer for your consideration, embraces those subjects which must be taught to give the student a sound medical education and to qualify him to take his degree. While I think it will meet present requirements, it will not involve the University in excessive expenditure and can easily be enlarged when the time comes.

1. Anatomy and Physiology (already provided for). 2. Chemistry (already provided for). 3. Surgery (already provided for). 4. Practice of Medicine, including Insanity. 5. Pathology. 6. Midwifery and Diseases of Women and Children. 7. Medical Jurisprudence and Public Health. 8. Materia Medica and Dispensing.

All, or nearly all, these subjects require separate teachers. At present I think they can be taught by lecturers selected from the practitioners in the colony.

The Hospital is now thrown open to the students, and will afford the requisite cases for clinical instruction. I do not think that the Council could do better than leave the clinical instruction of the students in the hands of the honorary physicians and surgeons of that institution; arrangements could doubtless be made by which these gentlemen would deliver clinical lectures. The appointment of special clinical lecturers would thus be avoided.

Dispensing could also be well taught at the Hospital, and the Out-patient Department could also be utilized for the training of the more advanced students.

Of course, it is of vital importance that the Hospital should work harmoniously with the University, and with a view to this I would suggest the advisability of the University Council taking steps to be represented on the Hospital Committee.

I do not think that Botany and Natural History should form part of the Medical Curriculum proper. A sufficient knowledge of these subjects ought, however, to be exacted by making them compulsory subjects in the preliminary examination.

For the proper teaching of Botany it is very desirable that a supply of plants be always available for lecture purposes and for the private study of the students. In many places a part of the Botanical Gardens is laid aside for this purpose, and there the plants are arranged in plots according to their natural orders.

Do you think that a small part of our gardens lying to the west of the North-east Valley road could be laid out in this manner?

The weak spots in this scheme are undoubtedly the arrangements for teaching Physiology, Pathology, and Public Health.

Physiology is now such a large and important subject that in the great schools it is always taught alone and by a specially trained teacher. In the smaller schools, however, it is very commonly combined with Anatomy, as in my chair, and though I have not had the training in Physiology that I have had in Anatomy, yet I think I know the subject sufficiently well to justify me in recommending the Council not to separate Anatomy and Physiology at present.

Pathology and Public Health are also subjects that require special training. A man, to teach them efficiently, must have given more time to them than is usually done by the general practitioner. It is to be hoped, however, that men may come out who have studied the subjects specially, and the degrees in Public Health which are now given by some of the universities at Home have greatly tended to increase knowledge in that branch among practitioners.

With a view, therefore, to always securing the best men in the lectureships I think the Council would do well to continue the plan adopted with the surgery lectureship and make the appointment for a short term of years.

As regards the other classes, they are on subjects the everyday business of all practitioners, and ought to be well taught. Insanity, however, can only be properly taught in connection with the Asylum.

These classes are not all of equal importance, and some might be taught during a summer session.

I am, gentlemen,

Your obedient servant,

(Signed) John H. Scott.

The Council,
University of Otago.

UNIVERSITY OF OTAGO MEDICAL SCHOOL

This letter came before the Council on 11th October, and a special meeting was called for the 24th to discuss it, at which Scott was present. A committee was appointed to consider the question, which reported favourably on the plan on 18th January, 1882, and Scott was instructed to draft regulations for the degrees.

The plan was submitted during the year 1882 to the Senate of the University of New Zealand and approved by it, and Scott wrote again to the Council at considerable length on 18th September:—

University,
September 18, 1882.

Sir,

I have the honour to bring before you the following matters concerning the Medical School.

I. I think it is now advisable to take steps towards making the appointments to the teaching staff required to carry out the plan of instruction adopted by the Senate of the New Zealand University at its last meeting.

Lecturers must be secured to teach the following subjects:—

1. Practice of Physic. 2. Pathology. 3. Medical Jurisprudence and Public Health. 4. Midwifery. 5. Materia Medica. It would be well, I think, to draw up a circular, stating the duties and salary of each lectureship and fixing a day on or before which all candidates must send in their applications and testimonials. This may be distributed throughout Otago or even through a larger area, should the committee prefer it. As to salary, I would point out that the duties required from the teachers of Practice of Physic and Medical Jurisprudence are equal to those now discharged by the lecturer on Surgery. The Pathology lectureship, while not requiring the same amount of teaching, involves work of such a nature as must materially interfere with the midwifery practice of the holder. I therefore recommend the Council to place it on the same footing as to salary as Surgery, Practice of Medicine, and Medical Jurisprudence. The courses required on Materia Medica and Midwifery are short; £100 would suffice for each. According to this plan the total amount required is £800 per annum, but as no salary ought to be paid till the lecturer enters on his duties the whole of this sum will not be required for some years. £300 will probably be required in 1885, and the remainder not till 1886.

II. It is essential to the efficiency of the teaching of both my classes—Anatomy and Physiology—that the man I have to assist me should be more than a mere labourer. A handy man is a necessity to me. My present assistant has proved himself invaluable during the four years I have been teaching here, and but for him the Anatomical Museum would be in a very backward state.* He has always, however, been discharged shortly after the end of each session, and for four months of each year has been without regular employment. He has a wife and family to support and intends leaving his present employment in November unless his pay can be placed on a more satisfactory footing. The larger the school becomes the more work I shall have to give him, but even now I have enough to keep him busy during the greater part of the year. Could not some arrangement be made so that he could be employed in the Museum during part of the recess? It is an exceedingly difficult thing for me to get a suitable man for my work, and I cannot too strongly urge on the Council the desirability of keeping the one I have got.

* Mr. Jefferson, referred to below, pp. 85, 103.

III. Now that the Medical School is being arranged with a view to giving complete instruction in Medicine and the sciences on which it is founded, I must ask for some money for Physiological apparatus. £50 was given me last year to get what I considered necessary for a semi-popular course on Physiology to Teachers. I have laid this out to the best advantage, but I feel that many things are still necessary for a course such as is required for a student of Medicine. £100 would get most of what I require.

IV. On a previous occasion I brought under the notice of the Council the subject of the teaching of Botany. I pointed out that for this purpose a botanic garden, with the plants arranged in their natural orders, was necessary, and that, having regard to the Medical School, as many as possible of the plants used in Medicine should be there cultivated. The members of the Council then agreed that the formation of such a garden was very desirable, and I have since learnt that the Domain Board is willing to give the University the use of the ground required. It is among the nurseries belonging to the Botanic Garden, and it is in every way well suited to the purpose.

The Board will undertake to form and maintain the garden in the manner desired by the University, and will only charge the Council with the first cost of formation and with what is found hereafter to be necessary for its maintenance.

The Board is also able to furnish without cost out of the garden a large number of plants.

I am,

Your obedient servant,

(Signed) John H. Scott.

The Chancellor,
University of Otago.

Scott wrote again about the garden a year later; apparently nothing had been done in the meantime.

The day after this important letter was received the Council appointed a committee of the Chancellor, Dr. Burns, and Dr. William Macdonald to take steps for advertising the appointments decided upon, and applications were called for 1st May, 1883.

On 14th November, 1882, the committee recommended in accordance with Scott's second letter that lecturers should be appointed in: 1. Medicine; 2. Medical Jurisprudence and Public Health; 3. Pathology (all these to be at a salary of £150 a year, with class fees, which was to be raised to £200 a year when funds permitted); 4. Midwifery; 5. Materia Medica (the latter two were to receive £100 a year and class fees). In addition Scott's other requests were complied with, he was granted £50 in 1882 and again in 1883 for physiological apparatus, his assistant was to receive £120 a year, and the man's services were to be at the disposal of the Council when Scott did not want them, and Mr. G. M. Thomson was to be advised as to the plants required for the Botanic Garden. This was already more than two years after the date of Scott's first letter, and it was not the end of the delay.

UNIVERSITY OF OTAGO MEDICAL SCHOOL

On 7th March, 1883, the University Council resolved as follows:—

That as the Council of the University of Otago has now a teaching staff for a two years' course of medical education, which has been accepted by the University of Edinburgh and other medical schools, and as it has recently resolved to establish the lectureships (five in number) necessary for a complete medical curriculum, the Council respectfully requests that the Senate of the New Zealand University recognise the University of Otago as a medical school, and the terms heretofore kept by students in the curriculum of medicine as if they had been kept subsequent to recognition.

That the Chancellor be requested to communicate the above to the Chancellor of New Zealand University.

The University of New Zealand at once complied with this request.

In May, 1883, when applications for the appointments should have been received, Scott pressed that they should be filled, that they should be limited to three years, and that the salaries should be fixed and not variable. The Council agreed; the first three were fixed at £200 a year, with fees, the last two at £100 a year, with fees.

On 14th November the following applications for the lectureships were considered:—

Practice of Medicine: Drs. Daniel Colquhoun, I. de Zouche, and W. M. Stenhouse. Dr. Colquhoun was appointed.

Pathology and Morbid Anatomy: Drs. E. D. Mackellar, W. S. Roberts, and Gordon Macdonald. Dr. Mackellar was appointed.

Midwifery: Drs. F. C. Batchelor, John Macdonald, and Stenhouse. Dr. Batchelor was appointed.

Materia Medica: Drs. John Macdonald and — Elliott. Dr. Macdonald was appointed.

Medical Jurisprudence and Public Health: Dr. Stenhouse. Since there was only one applicant the appointment was deferred.

In April, 1884, Dr. Mackellar, who was in Auckland, wrote to suggest the postponement of his course from the third to the fourth year for the students then in their third year, to whom he proposed to add the students then in their second year, who would by that time be in their third, in order to make a larger class and so better worth teaching. The suggestion, it seems, was not approved. Later he made the ingenious suggestion of applying his first year's salary to the purchase of apparatus; however, he never took up the appointment.

No very precise lists of students entering the school in each year are now available, but judging by the fresh names occurring in the examination lists published year by year, the increasing entries must



H. D. Skinner.

From a photograph kindly lent by Dr. H. D. Skinner.

have been satisfactory as far as they went. For instance, in 1877 two new names are to be found, 1878 two, 1879 three, 1880 four, 1881 two, 1882 seven, 1883 seven, 1884 eight.

Meantime, in March, 1884, Scott addressed another important letter to the Chancellor, which is as follows:—

University of Otago,

March 11, 1884.

Sir,

I believe it is the desire of some of the members of the Council to make the appointment of the lectureship of Public Health and Medical Jurisprudence at an early date. I do not think this course, if followed, will prove to be for the good of the Medical School. I therefore take the liberty of asking you to defer the appointment. The following considerations will explain my action in this matter. No lectures are required in either of these subjects till May, 1886, so far as the Medical School is concerned, therefore no appointment need be made for a year at least. On a previous occasion the Council most wisely declined to fill up this lectureship. Now, by the regulations of the New Zealand University, attendance on a six months' course of lectures on Medical Jurisprudence is required from students. The University has recognized the great and increasing importance of a sound knowledge of modern Sanitary Science, and has required a longer course on the subject than is the case in most of the older medical schools at Home. The instruction in Sanitary Science given to medical students by most of the Home Schools has till the last few years been very unsatisfactory, only in those most recently organised is this important subject taught as it ought to be. Degrees and certificates in Public Health are granted by some of these licensing bodies. To carry out the intention of our degree-giving body, as well as to put the teaching of Public Medicine on a par with that of the older subjects of the medical curriculum, the Council ought, I think, to secure the services of some one possessing such evidence of training as one of these certificates or degrees. I am quite aware that the services of such a man may be difficult to secure, but to make the appointment makes it impossible, and nothing is lost by delay.

Perhaps some plan like the following might be adopted. It is, at any rate, worthy of consideration. A Health Officer for Dunedin and suburbs would be an exceedingly valuable acquisition to our city. Might it not be possible for the city authorities and the University Council to combine to offer sufficient inducement to some qualified man to accept the double appointment of Health Officer for the Dunedin District and lecturer on Public Health and Medical Jurisprudence at the University?

Hoping that you will give this proposal due consideration,

I am, your obedient servant,

(Signed) John H. Scott.

The Chancellor,

University of Otago.

It has been remarked that Dr. Coughtrey, in his opening address, laid stress on the importance of preventive medicine, and it is to be observed that Scott, in his letter, did the same, and with much greater emphasis and practical application. This subject was thus receiving much more attention here than it received in the London schools twenty years later. Years afterwards, as is noted further on, the Chair of Bacteriology and Public Health at Otago came to be occupied by a man who had learnt preventive medicine in the hard school

of the Gallipoli campaign. Thus Preventive Medicine has received much more than its usual share of attention in the Otago School.

Dr. Colquhoun arrived in Dunedin about April, 1884, and in November of that year he indicated to the Council that he was considerably surprised and annoyed to find that he was to receive no salary till 1885. The Council decided to regard him as having commenced his duties on 1st December, 1884.

The present writer never met Dr. Scott, but the perusal of the records which he left behind leaves one with the impression of a very strong character. The originals of the letters here printed are in his own handwriting, which is very large and firm and unmistakably clear, and they are written on plain lined foolscap paper. One visualises at once a man who did the utmost with the means at his disposal. His Scottish care of the bawbees is evident in these letters; not his own bawbees, but those of the University. He recognized clearly enough that that body had undertaken an enterprise for which financially it was inadequately equipped, and he accepted it as his business to forward that enterprise to the full extent of his personal capacity and with all possible limitation of expense, and so he concentrated on essentials and disregarded all superfluities. Such qualities must have been invaluable to the University and the Medical School, and they certainly brought a high measure of success; nothing could have been better for an embryo school with limited accommodation and equipment, a small and poorly paid staff, and a small body of students.

Contemporaries reported calling upon him in his own room at the University, where he boiled the kettle to make his own tea in a state of inadequate comfort which none of his successors would have put up with.

But all men have the defects of their qualities; such a man as Scott, at any rate in later life, does not realize the importance of recent advances in the subjects of his curriculum, and resists, if he does not actually come into conflict with, his more progressive colleagues.

Scott had great artistic gifts, and his chief intimacies appear to have been among persons with like tastes, as, for instance, W. S. Roberts, the Professor of Pathology, who was a considerable water-colour artist. Mr. R. H. Neilson, Secretary to the Dunedin Public Art Gallery, was kind enough to write the following note on Scott's services to art in the city:—

The Otago Art Society was formed in 1875, the first exhibition was held in November, 1876, Dr. J. H. Scott was elected an artist, or working, member of the Society the following year. He was appointed Hon. Secretary towards the end of December, 1881, holding this office until the time of his death. During these many years he rendered signal and

valuable service to the Society, and also to the Dunedin Art Gallery as a trustee for many years.

As an artist he adopted water-colour as his medium. Careful and painstaking in every detail, his work was greatly appreciated at the annual exhibitions, and his work entitled "Moeraki Boulders," painted in 1889, adorns the walls of the Public Art Gallery at Logan Park.

During one of his visits to the Homeland he was entrusted with the selection of a picture for the Art Gallery, and bought a work by the Scottish painter, J. Caddenhead; this work, "Autumn in the Valley," is one of the valued works in the Gallery, but perhaps his greatest success as a sole selector for the gallery is to be seen in a powerful work in water-colour, "Among the Hills, Barmouth, North Wales"; another fine choice purchased at the same time, also a water-colour, being "A Yorkshire Pastoral," by Claude Hayes. Apart from these he was instrumental, with others, in securing Dunedin's great masterpiece, "The Otira Gorge," by P. van der Velden, and many other paintings, which, bought in these early days, are really the foundation upon which the Dunedin civic collection has been built.

Mr. Neilson could also remember that at committee meetings, when controversial questions were under discussion, Scott would wait until the disputants had exhausted themselves, and then come in with some final judgment which settled how things were going to be done.

His colleague, Dr. Colquhoun, wrote of him years later that he was without parade or fuss, and did everything for himself, partly to keep down expense for the University Council. All his work showed order and method, and was "clear, simple, thorough, and austere." He acted as his own secretary when Dean of the Medical School.

His scientific interest was in Anthropology, and he made a large collection of Polynesian and other osteological specimens, which is preserved in the Anatomical Museum. His principal published work on the subject, a paper of some sixty pages, is a "Contribution to the Osteology of the Aborigines of New Zealand and the Chatham Islands," which was printed in the Transactions and Proceedings of the New Zealand Institute, Vol. XXVI, 1893, in which he recorded more than seventy measurements in each of more than eighty skulls. His conclusions appear to have supported those generally held by authorities on the subject. He wrote: "... The mixed origin of the Maori race. An examination of the cranial indices and the extent of their variation shows this clearly. These demonstrate two distinct types and intermediate forms . . . Melanesian and Polynesian . . . Morioris also (from the variation of indices) originate from the two great Pacific stocks."

The Intercolonial Medical Congress of Australasia was instituted in 1887 to celebrate the Jubilee of Queen Victoria. The fourth session was held in Dunedin in 1896, with Dr. F. C. Batchelor as President. This meeting was remembered by visiting Australians at least thirty years afterwards. In the report of it in the *New Zealand Medical Journal* of April, 1896, it is written: "The labours of the Executive Committee commenced early in 1894, and, headed by our enthusiastic President and guided by our Secretary-in-Chief, Professor Scott (than whom no better secretary could be found), held meeting after meeting until all the vast array of preparation was disposed of."

Sir Louis Barnett, C.M.G., Emeritus Professor of Surgery at Otago, of whom more later, who was both a pupil and a colleague of Scott's, was good enough to write the following appreciative reminiscence of him:—

John Halliday Scott: Impressions of as a teacher.

Punctual to the minute. Meticulous in the presentation of anatomical knowledge as acquired and taught in Edinburgh. Every detail known to him was, I think, expounded, and the students were expected to take it all in. He lectured for a complete hour five days in the week, and on Saturday mornings had a viva voce question and answer or quiz class, at which he tested the intelligence and industry of his students. He was scathing at these useful revisals on slackers and nit-wits, and most of us writhed at times under his sarcastic criticism. All the same, we liked him, admired him, and there were never any breaches of discipline.

The first part of his course was human osteology, and that lasted a full six weeks. We had to know every little mark on every bone, large or small, and just what it was there for. Little fragments of bone were submitted to us for spotting; we had to know what bone it came from and whether right or left, and so on. We certainly learnt how to observe, and some of us became enthusiastic in hunting about old Maori camps for bits of bone to identify. Incidentally, we brought many a Maori skull to our esteemed professor, who was collecting material for his paper on Maori craniology.

Scott was an artist of no mean calibre, and painted a splendid series of anatomical diagrams for his lectures, and as regards black-board diagrams, I have never seen his equal for speed, strength, and clarity.

I had the opportunity of comparing Scott's lectures with those given at the University of Edinburgh and at Minto House, and Scott's teaching was by far the most thorough.

The dissecting-room teaching was not quite so good; there were sufficient bodies, but embalming was in those days poor, and the soft tissues became shrunken and leathery. Moreover, we could not get much individual instruction, as

Scott had no demonstrators. In the occasional absence of the professor from the dissecting-room high and irreverent jinks were not uncommon.

Jefferson was Scott's factotum; dissecting-room porter, embalmer, plaster-cast maker, carpenter, diagram-hanger, and so forth, a very capable, handy man, and obliging, too, albeit rather morose, as if under a perpetual grievance. I daresay he did not get as good wages in those early days as he was entitled to on his merits.

As Dean of the Medical Faculty:

When in the fullness of time I came on to the teaching staff of the Medical School and found Scott installed as Dean, I could not but be impressed with his rigid adherence to cast-iron procedure and method. He gave full measure himself and expected others to do likewise, but he looked askance at new ideas. He was indeed ultra-conservative. He kept the school going well, but its efficiency and usefulness were not being expanded as they subsequently were under the deanship of Sir Lindo Ferguson, who, as we all know, possessed those qualities of vision and enterprise so necessary for progress.

As a man:

Above all things Scott hated sham, and he had a quick eye and ear to detect exaggerations or deviations from the strict paths of truth. Although by no means garrulous, he was quick-witted and had a great gift of cynical humour. This used to come out often enough when he and I and some others, all of the rabbit class, used to play golf on Saturday afternoons. How we all enjoyed that happy recreation!

His close friends were mostly those with artistic leanings, and he exerted a fine influence on the development of art culture in this part of the world.

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CHAPTER VIII

1885 — 1890

THE FULL COURSE THE LECTURERS

IN 1885 a new era opened for the annalist of the Otago Medical School writing in 1940. Until then only written records, often incomplete, were accessible, but for the later period it was possible to confer with both members of the staff and students who took part in the events. From 1885 onwards the full medical course could be completed at Dunedin.

In considering the early members of the University Staff, one cannot but be impressed with the quality of many of their number. To take the matter of academic distinctions alone, those of Sale have already been mentioned, and one finds that the first three Curators of the Museum were all Fellows of the Royal Society. In time the appointment of Lecturer on the Practice of Medicine was advertised at a salary of £200 a year, with class-fees and the right of private practice, and the successful candidate was Dr. Daniel Colquhoun, who was M.D., M.R.C.P., both of London, with one first class and a scholarship and several medals in his course. He was at that time Senior Assistant Physician at Charing Cross Hospital, and a member of the editorial staff of the *Medical Times and Gazette*. Such a man was in the running for the highest positions open to a physician anywhere in the British Empire.

Dr. Colquhoun had a brother in Australia, and he had taken a voyage there as a ship's surgeon when he heard of the appointment; his application was dated from Melbourne. He returned to England with his ship, and sent out a sheaf of eighteen remarkable testimonials from distinguished men, all couched in the highest terms; the following from a physician at his hospital is no more than a fair example: "A man of singularly high attainments, a well-educated physician, eminently successful as a teacher, and esteemed by all who have the advantage of his acquaintance, I know of no one more likely to add to the reputation of a medical school than my friend and former colleague, Dr. Colquhoun." Surely such a man was a great find for a young school with a dozen or so students at the other side of the world.

There was something of the gold-headed cane about Dr. Colquhoun; he brought with him the manner of the old-time London hospital physician; his presence was emphatically dignified, and one feels that his influence in the place must have been most valuable.

A brother North Briton, and perhaps of a like conservative turn, he was closely associated with Dr. J. H. Scott, but in committee work he was rather remarkable for his fondness for figuring in a minority of one.

No doubt he did a great deal for the Hospital; he used to say that his greatest service was the segregation of medical and surgical cases into separate wards. He early asked the Chancellor to provide a microscope, which the Hospital Committee had refused, and also pressed for a medical library and a supply of current medical periodicals. As a result of the latter, Dr. Scott and a committee were asked to make out a list of the books and papers required; however, two years later the students asked repeatedly for the addition of medical books to the library in terms which suggest that the existing stock was still quite inadequate. Colquhoun also suggested "that a record of contemporary work should be kept for reference from the beginning of the Medical School, and any further delay in this matter will be a grave detriment to our students, and will make the burden heavier at a future date, when larger arrears will have to be made up." He thus displayed among his other gifts that of prophecy.

There is a melancholy familiarity about a written commentary of Colquhoun's on a class examination: "All these papers were well answered, but most carelessly written; Mr. — in particular completely lost his chance of first place by the illegibility of his paper."

Colquhoun was a lovable person, kind and generous, his students were undoubtedly very fond of him, and on his appearance at a British Medical Association dinner when on a visit some years after his retirement he had a reception which must have been very moving. His teaching was undoubtedly sound, but, at any rate in later years, it became stereotyped; he read his lectures, which contained *clichés* which ribald students came to look for: "After war comes famine, after famine comes pestilence," was repeated to every class for five and thirty years. With his colleagues he was popular in the same way, but whatever the opinion expressed, he was certain to take the opposite view. Stories were current, perhaps apocryphal, of occasions when the family of a patient pressed to have his opinion in consultation; the case being quite straightforward, the practitioner would suggest some outrageous diagnosis in order that the consultant might have no reason for traversing the correct one.

Dr. Colquhoun was the first editor of the New Zealand Medical Journal, from 1887 to 1893.

However, academic qualifications are not everything, nor even essential. Ferdinand Campion Batchelor, who was elected Lecturer on Midwifery and Gynæcology, held no more than the diplomas of L.S.A. and M.R.C.S. (Eng.), L.R.C.P. and L.M. (Edin.) till he took the practitioners' M.D. of the University of Durham at the age of thirty-five. If all communities contain their conservative (or reactionary) and revolutionary (or progressive) elements, as you choose to name them, and if Scott represented the conservative factor in the

Otago Medical School, Batchelor was the protagonist of the revolutionary camp. He was the advocate of every improvement that became available, and he was not in the least concerned that his proposals should "go through the proper channels," nor about the fact that they would cost money. He pursued his ends, all quite altruistic, with immense energy, raising money, commandeering money from his friends, carrying everything on the wave of his enthusiasm, and working himself to a standstill in the process. An intimate colleague used to recall Batchelor's greeting to him on returning from England: "I am raising funds for a laboratory; I have put you down for £25."

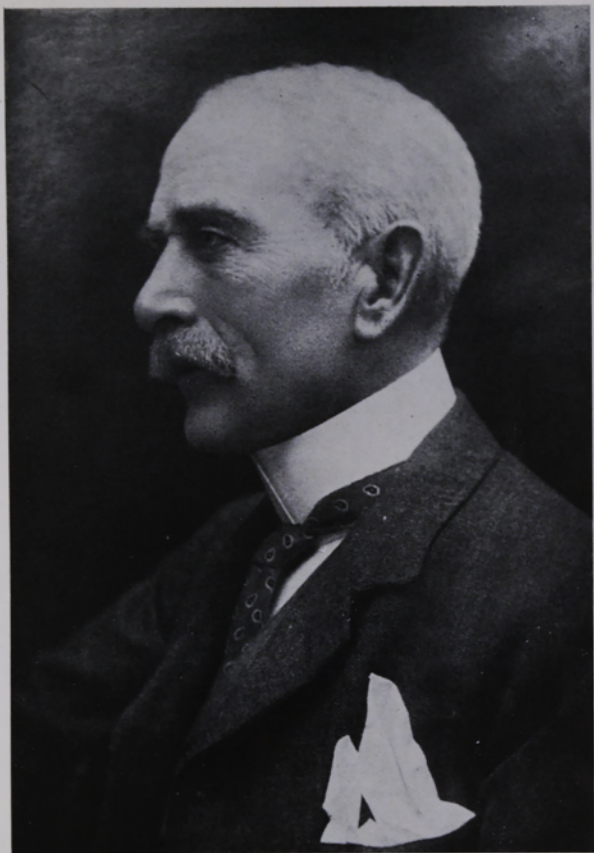
Entirely honest and earnest, he could not put up with shams of any kind, and controversy was apt to run high. He once read a paper called "Notes on 100 Cases of Abdominal Surgery," which was published in the Australian Medical Journal of 1891, and records a remarkable achievement for the period. One of his hearers at least thought it too remarkable, and stories long survived of hats being knocked off and the arc described on the pavement by the bell-topper of the time before it came to rest in the gutter.

Batchelor was apprenticed to a country practitioner in Essex at the age of sixteen, after which he went to Guy's Hospital, and qualified as noted above in 1871. He came to New Zealand for his health in 1874, and settled in Dunedin, and was in the first group of men appointed to the honorary staff in 1877. He took up surgery, and was the pioneer in New Zealand of abdominal operation. He first followed Lawson Tait, whose practice he had studied, and later took up that in vogue at the Chelsea Hospital for Women in 1885, thus leaning towards gynaecology.

On returning to New Zealand after this, he became Lecturer on Midwifery and Gynaecology at the school, and Physician for the same at the Hospital. He left the staff in 1891, since he had undertaken a campaign for the improvement of the Hospital arrangements, but sat on the Trustees' Committee; he rejoined the staff in 1894. He was chiefly responsible for what has been called "the first modern block of hospital buildings in New Zealand." Later, in 1906, he established a Maternity Hospital for the instruction of students. He was also a pioneer of X-ray work.

He was President of the Section of Diseases of Women at the Intercolonial Congress at Melbourne in 1889, and President of the Congress held in Dunedin in 1896, previously mentioned. He was a Fellow of the London Obstetrical Society and Vice-President of the British Gynaecological Society.

In 1914-15 he served for several months as a consultant with the N.Z.E.F. in Egypt in the rank of lieutenant-colonel, at the age of 65, and did a very great deal for prophylaxis against venereal disease, which was becoming alarmingly prevalent among the troops. He was invalided at the end of the summer, and died within a short time of his return, in September, 1915.



Geo. J. Walckele

From a photograph in Dunedin Hospital.

Dr. John Macdonald, who was appointed Lecturer on *Materia Medica*, was an Edinburgh graduate, and had held appointments at Kidderminster. He also practised at Lincoln and served on the Transatlantic mail steamers. He was a big, handsome Scotsman of a striking presence, but few records of his work in the school have survived. A student of his time described him as a man who never quarrelled, and never did anything unethical. He was for many years on the Hospital Staff as Physician for Diseases of the Skin.

Dr. E. D. Mackellar, who had been chosen as Lecturer in Pathology, was unable to lecture in the session of 1885, and Dr. W. S. Roberts, Resident Medical Officer at the Hospital, was, with the permission of the Hospital Committee, appointed temporary lecturer. Mackellar never took up the appointment, and presumably resigned.

In July, 1885, Scott pressed the Council to fill the appointments in Medical Jurisprudence and Public Health and in Pathology, and a committee of the Chancellor and Drs. Burns and Hocken, together with Scott, was set up to settle the terms, and at the end of September it was decided to advertise the posts, and requests accordingly were made to the Agent General in London, Sir F. Dillon Bell, K.C.M.G., and not to the University agent in Edinburgh. Duties were to be taken up on 1st May, 1886. The Agent General, in his acknowledgement on 1st November, 1885, noted the short time allowed, and stated that he had advertised in *The Lancet*, *The British Medical Journal*, and *The Edinburgh Medical Journal*. He stated further that a full account of the University and school was supplied to the candidates—one wonders if Scott's or Colquhoun's protests had had anything to do with this—and the following suggestion was inserted with regard to the Public Health lecturer's appointment, which clearly derived from Scott: "There is a probability that the City of Dunedin and the suburban municipalities would in time require his services in the interests of Public Health. It may also be added that connection with the University would materially assist in obtaining a general practice"—on which there was no restriction. It was also understood, either then or later, that though the appointments were for three years their holders were eligible for re-election, and might become permanent in them.

Again, there were large numbers of applicants for these posts—twenty-eight for Medical Jurisprudence and Public Health and fourteen for Pathology, including R. G. Hebb, a King's College Hospital man, like Roberts, and afterwards a most able Physician-pathologist at Westminster Hospital. W. S. Roberts, the local candidate, was selected.

William Stewart Roberts, M.R.C.S. (Eng.), was educated at Cheltenham and King's College Hospital, London. He was for several years house surgeon or resident medical officer at Dunedin Hospital. He was a highly skilful anæsthetist. He was a keen sportsman, and had played for England at Rugby football and was a good oarsman. He was interested in music, and was a water-colour artist

UNIVERSITY OF OTAGO MEDICAL SCHOOL

of considerable skill; he and Scott were closely associated in sketching.

For Medical Jurisprudence and Public Health Frank Ogston was appointed, of whom the Chancellor wrote to the Agent General: "My own opinion is that Ogston will become an authority in New Zealand on the important subjects of his chair." He was M.B., C.M. (Aberdeen), and had been Associate Professor of Jurisprudence at that University, where his father was the professor. His elder brother was a surgeon on the staff at Aberdeen. In time he became District Health Officer for Otago and Southland.

Meantime, recognition of the school by the Royal College of Surgeons still hung fire. In November, 1886, L. E. Barnett, then a student in Edinburgh, and afterwards Professor of Surgery at Otago, wrote to inform the Council that the school was not recognized, and in December a further request for recognition was made. The Chancellor indicated that the complete course at Otago was recognized by Edinburgh University, which had previously recognized the individual lecturers, and he continued: "Now, however, this individual recognition has been merged in the general recognition accorded to the school. We have every reason to believe that the instruction given has proved satisfactory to the examiners in Edinburgh, and several of our students have succeeded in winning there the highest university honours." He then specified the conditions in Dunedin.

In April, 1887, the Secretary of the College, evasive as ever, wrote to say that the Conjoint Board of the Royal Colleges of Physicians of London and Surgeons of England had been formed for examination purposes, and that the Otago application had been forwarded to this Board. *But* information was still lacking as to the number of beds in Dunedin Hospital, their distribution between medical and surgical cases, the number of beds daily filled, and the variety of the cases to be studied. The comparison with Edinburgh (and Aberdeen) was held to be irrelevant, because the students were resident at both these institutions, whereas the Royal Colleges had nothing to go upon but the students' records. The required information was sent in July, and a year later, in August, 1888, the Otago school was recognized by the Conjoint Board.

As examples of the success of New Zealand students at Edinburgh some of those who qualified in 1885 may be quoted: F. Truby King, from New Zealand, though not from Otago, won the Ettles Scholarship, the chief academic distinction for the whole course; F. H. Jeffcoat, of Otago, was runner-up, and P. A. Lindsay, also of Otago, was third. Jeffcoat's record is sufficiently remarkable; he won first class honours in all subjects except Natural Science, with two first prizes and three first medals and three extra-mural prizes. He passed his second and third professional examinations with distinction, and took first class honours in his final M.B. examination, being one of seven so distinguished among 216 candidates. He won the Beaney Prize and the Stark Scholarship, besides the James

Hutchison and Buchanan Scholarships, which were not tenable with the Stark. He was also President of the Royal Medical Society of Edinburgh.

Students were required to register with the University of New Zealand as well as at Otago, and throughout the records indications continually occur of the stiffening of the course. For instance, one finds that the attendance at clinical lectures is made compulsory—this was at the request of the medical staff, in order to conform to the Home regulations—also that the time given to Organic Chemistry is inadequate to the requirements of the medical students.

Early in 1888 new regulations for the medical course, under five headings, were approved by the Professorial Board:—

1. A preliminary scientific examination in Physics and Biology before entering the medical course. (The object of this was to prevent students attempting to take Anatomy, Chemistry, and Biology all in their first year.)
2. Practical Chemistry to be extended from three months to six.
3. "Pre-registration" Chemistry to be recognized.
4. Clinical instruction essential; attendance at any hospital where it is not given not to be recognized.
5. A C.M. degree to be instituted.

In April, 1888, Professor Scott wrote to the Council asking for a change in the Chemistry lecture-hour for medical students, "who begin work at 9.30 a.m. and are in the Museum or the University till 7.30 p.m., with an interval for lunch," in these circumstances he found them too weary to attend the lecture on Chemistry, which, moreover, cut into the time for evening reading. He suggested that the Chemistry lecture should be from 8.30 to 9.30 a.m. The students themselves dotted the i's and crossed the t's of this by submitting the following time-table:—

- 9.30-11.30: Biology or Hospital.
- 11.30-12.30: Anatomy Lecture.
- 2-4: Anatomy, Practical.
- 4-5: Biology or Surgery Lecture.
- 5-6: Physiology; or
- 5.30-6.30: Practical Chemistry.
- 6.30-7.30: Chemistry Lecture.

They did not get home till 8 and could not get to work before 9.

This has a very familiar ring to one accustomed to the syllabus of later days, and it illustrates the fundamental, and it seems inevitable, defect of a medical education: "Too much teaching, too little learning."

The students as a body did not fail to express their views on occasion. For instance, at the beginning of 1887 Mr. Macandrew gave notice of motion in the University Council to the effect that the

affiliation with the University of New Zealand had been a mistake, that the University of Otago should resume its position under the old Statute, and that it should apply again for a Royal Charter. Ultimately the first two clauses were withdrawn and the third passed. Mr. Macandrew died the next day, but the application for a Charter was drawn up and forwarded to the Governor for submission to Her Majesty, who, however, declined it on the advice of her Ministers.

The students did not approve of the proposed change, and at a meeting of past and present members passed a resolution to that effect, which they forwarded to the Governor.

Boys, as we know, will be boys, and Scott, as Chairman of the Professorial Board in 1889, advised the Chancellor "That the attention of the Council be directed to the fact that the Introductory Meeting, as hitherto conducted, is hurtful to the University and subversive of discipline." We are not informed that the Medical School was excluded from these strictures.

Financial difficulties were now being felt, revenue was falling, and with the increasing numbers of the students the demands for more and better accommodation were becoming imperative. The records afford pathetic evidence of the parsimony with which things had to be conducted. Jeffery Parker's demands for the upkeep of the Museum were cut to the bone; he could barely obtain the irreducible minimum on which it was possible to keep his institution in being. At the end of 1888 he reported that he already had nineteen students in a laboratory which was built to hold twenty; if the numbers increased, which he naturally anticipated, some would not be able to get certificates, which would be a serious matter for medical students.

A year before this Scott had asked for enlargement of the dissecting room and for facilities for teaching histology; he noted that his last class had been of thirty-one students, which was too large for comfort, health, or discipline, and in the University Council minutes of 16th November, 1886, it is noted (1) That the dissecting room is to be enlarged, and (2) that the salaries of the lecturers are to be reduced.

Indeed, nearly a year before this, in January, 1886, the Finance Committee of the Council had advised reductions in the salaries of the lecturers on Medicine, on Medical Jurisprudence and Public Health, and on Pathology from £200 to £150 on the expiry of their three years term.

Considering the state of University finance, it is not without humour to find an Otago student writing to the Council from Edinburgh to ask for assistance for the Edinburgh Australasian Club.

Dr. Hocken had been a member of the University Council since 1883. In May, 1887, the Professorial Board requested the Council to nominate lecturers to sit on the Board, together with one or two members of the medical staff of the Hospital, and Drs. Brown and Batchelor were shortly afterwards appointed.

Naturally, some co-operation became necessary between the University Council and the Committee of the Hospital Trustees. For instance, in August, 1887, the need for an operating theatre had become evident, and its construction was urged by Dr. Scott. It was to cost £1,516; the Hospital Trustees met the Finance Committee of the Council, which agreed to pay £200, on which a Government subsidy of £240 was anticipated. The plans were to be approved by the professors and lecturers concerned, and the question of the legality of the procedure was referred to the University's solicitor. Next year, in March, a further meeting was called, and the Trustees, affirming that the theatre was built for the benefit of the students, required the Council to pay another £200, since the promised Government subsidy had not been received. The Council, it seems, complied. Affairs were probably settled amicably, since the Trustees invited the members of the Council to be present at the opening of the theatre. The figures quoted are taken from Hospital records; those in the Council records differ in some particulars, but the general sense is the same.

In the same years it was recommended in the University Council that the Act should be amended so as to enable representatives of the University of Otago to sit upon the Hospital Trustees Board, and at the end of 1889 the Council asked the Trustees to put the lecturers on Medicine and Surgery on the Hospital staff every year, and to appoint the lecturer on Pathology as Pathologist to the Hospital; with these requests the Trustees complied.

Nevertheless, at the end of 1889 Dr. Hocken advised the University Council that Dr. Colquhoun had not been re-elected to the Hospital Staff, and urged that the Council should formally request his reinstatement, and also procure powers to put its teachers on the staff. H. W. Maunsell, referred to below, was also omitted from the staff on at least one occasion when he was Lecturer on Surgery.

In the following year in the Professorial Board Dr. Batchelor gave notice of a complicated motion, which contained the following points: That in view of the increasing importance of the Medical School in the University, it had to be recognized that considerable educational responsibility rested upon the clinical staff of the Hospital, and that the Board appreciated the appointment to the staff of the teachers recommended by it. But apart from this accommodation there was no guarantee as to the qualifications of persons appointed to the staff, and legislation was required to secure the consideration of such persons by the Council, and also to give the Council a voice in the management of the Hospital. This was amended to read that the University Council should be represented on the Board of the Hospital Trustees, and that the Act should be amended accordingly.

Some eighteen months later Mr. (afterwards Sir James) Allen wrote to the Chancellor from the General Assembly Library to say that the question had been considered, but that nothing final had been decided. Ultimately it was secured by statute that the professors of

clinical subjects should be members of the Hospital staff. They were, however, required to apply for their appointments every year.

After the establishment of the lecturers a good deal of progress in medical instruction is recorded. In September, 1892, Dr. Batchelor wrote from London acknowledging permission to purchase diagrams. It is worth noting, as an indication of his progressive character, that this is the first *typewritten* letter in the University correspondence.

Soon after this Dr. Grabham, the Inspector of Hospitals, objected to the existence of a lying-in ward in a general hospital, and pressed for its conversion into a children's ward at Dunedin; the proper place to conduct midwifery for the poor was in the patients' own homes. Dr. Batchelor had already drawn up a scheme for attendance on lying-in women at home, and also rules for the Obstetric Department. He agreed to lecture to nurses, and it is perhaps characteristic that he stipulated for at least ten entries, that the fee should be paid at the time of application, and that a proportion of the fee should be paid to the janitor.

In 1889 Dr. William Brown resigned the lectureship in Surgery and his seat on the Professorial Board; in the latter he was succeeded by Dr. John Macdonald, the lecturer on *Materia Medica*.

Dr. Henry Widenham Maunsell, M.A., M.D., T.C.D., M.R.C.S. (Eng.), was appointed lecturer on Surgery, and he was a man of remarkable technical gifts and ingenuity. He is believed to have performed the first recorded operation for hydatid of the cerebellum, and he was a pioneer of the surgical treatment of cleft palate. He was best known for an operation for end-to-end anastomosis of the divided intestine, the idea of which was said to have been revealed to him by the treatment of a sleeve by his wife in the course of domestic dressmaking. He described the technique in a paper in the *American Journal of the Medical Sciences* of 1892. The divided ends of the gut were lightly joined together by long sutures, the free ends of which were passed into the lumen. A longitudinal incision was then made into the gut at a little distance from the trans-section, the free ends of the sutures were passed through it, and traction made until an artificial intussusception was formed and the peritoneal surfaces of the two pieces of gut brought into contact. The intussusception was drawn through the incision and the two cut surfaces joined by interrupted sutures. The intussusception was then reduced and the longitudinal incision closed. This operation was expected, even in America, to supplant the use of Murphy's button.

Maunsell served as house surgeon at Melbourne Hospital as a young man, and also at Hokitika, in New Zealand, and later settled in Dunedin. He went to London in 1892, at the age of 45, but London is a difficult place to take by storm at that age. However, he was a Fellow and Member of Council of the British Gynæcological Society, and its journal published a most appreciative obituary notice of him; he died in 1895 of bronchitis, following influenza.

An Irish graduate appointed to the staff about this time was Dr., afterwards Sir Lindo Ferguson, C.M.G., M.D. (Dub.), F.R.C.S.I., another of those whose gifts and experience proved of quite exceptional value to the Medical School of Otago University, and, indeed, to the public of New Zealand. A future Dean of the Medical School, some account of his career is given in a later chapter, in this place it is sufficient to say that he was the first fully trained ophthalmic surgeon, and, moreover, one who had had experience in teaching, to settle in New Zealand, or, indeed, in either Australia or New Zealand. He arrived in Dunedin in 1883, and immediately offered his services to the Hospital as Ophthalmic Surgeon, and was put on the staff, and in February, 1887, he was appointed honorary lecturer on Ophthalmology on Scott's recommendation. He undertook the course in his subject, delivered the lectures, recommended a textbook, and demonstrated cases at Dunedin Hospital.

In 1888 Dr. Isaiah de Zouche was appointed honorary lecturer on Diseases of Children. He was a well-qualified man, M.D., Q.U.I., M.R.C.S. (Eng.). He had been medical lecturer to the school-frigate *Conway*, lecturer in Botany at the Liverpool College, and Assistant Physician to the Liverpool Hospital for Children. He had written articles for Quain's "Dictionary of Medicine" and Roberts' "Hand-book of Medicine," both valuable reference books of the period.

Sir Louis Barnett wrote: "De Zouche, with whom I was friendly, was a charming man, a Huguenot, I think. He would not allow his children to speak anything else but French until after breakfast. He was always prepared for emergencies in his large midwifery practice, and his bag was always furnished with a cephalotribe."

Dr., afterwards Sir, F. Truby King, C.M.G., has been mentioned as Ettles Scholar of his year at Edinburgh. He returned to New Zealand and entered the asylum service, and was posted to Seacliff, the mental hospital for the Otago District.

In 1889 Truby King indicated his readiness to lecture on his subject; judging by some rather confused correspondence, one would conclude that the lectures were substituted for an impracticable clinical course, which had been suggested for his predecessor at Seacliff, Dr. Radford King (no relation).

Dr. MacGregor, then Inspector of Lunatic Asylums and Institutions, wrote to the Chancellor: "I had an eye on your interest in appointing Truby King. He is a very able and enthusiastic man, full of ambition, and one of the inducements to him in going to Seacliff was the hope of a university connection. You will find him a great acquisition."

Truby King attained to his principal distinction in another field, one, indeed, so far removed from the care of the insane as the feeding of infants. The Superintendent of Seacliff has charge of a large farm, and the story goes that King was dissatisfied with the state of his new-born stock, and started experiments to improve their nutrition. These proved so successful that he extended them to the

nutrition of infants, and elaborated a system which was really based on the most advanced American work of the period. He sought an appointment on the Dunedin Hospital staff, and when he was unsuccessful he instituted treatment at Karitane, a village on the Otago coast, near Seacliff, where he lived. He obtained very little recognition from the doctors, and went past them to the public, with the result that there were established the Plunket Society for the Protection of Women and Children, named after Lady Plunket, wife of the Governor of the time, and the Karitane Hospitals, for the care of new-born infants and the training of nurses capable of handling healthy babies, and named after the scene of his first experiments.

Of this achievement of Sir Truby King's it is certainly true to say that as an organisation it is very remarkable, and that as a system it introduced and maintained a number of most valuable and much needed reforms. It came, however, to be regarded as if engraved upon tables of stone, so that it failed to move with the times. It had no association with the Medical School, but students might attend the Karitane Hospital.

Throughout these years the number of students attending the school showed a fairly steady increase. The matter of women students requires a note. As long ago as 1881 it was recorded in the University Council minutes that women were admitted to classes, but it had to be observed that the medical course at Otago was incomplete, and that women who had taken classes there might not find it possible to finish their courses at any school in the United Kingdom. Later, when the complete course was open, on 13th May, 1885, it was specially affirmed in the University Council that "all classes are open to both sexes." A Miss Tracey's is the first woman's name to be found in the lists, in 1884, but she did not become qualified to practise medicine.

The first New Zealand graduate in Medicine was W. L. Christie, whose name first appears in the lists of 1882; he left the school for a period, but returned and qualified in 1887. Dr. Coughtrey's second address, above mentioned, was delivered to celebrate this event. Dr. Christie ultimately took the M.D. degree and the diploma of F.R.C.S. (Eng.); he practised first at Milton, in Otago, some forty miles south of Dunedin, afterwards in England at Bristol, and finally in Borneo. He died in 1921.

The conditions in the Hospital at this time were recalled by some publications made at the time of its Diamond Jubilee in 1926. The Exhibition building was a large square block, with two towers, in one of which was a clock, but the clock was very unreliable as a time-keeper, since it was always either fast or slow, according to whether the pigeons were roosting on the long hand when it pointed to III or when it pointed to IX. Inside the building was a large, empty court with a skylight and with two storeys of rooms round it, which contained the wards. The wards were much overcrowded, their walls

were of rough brick, and they were unceiled, heated by a large fire, and very imperfectly lighted by bat's wing gas-burners.

The first operating theatre was equally primitive, and the only nursing of male patients was done by untrained warders. These were the early days of antiseptics; carbolic acid was used like holy water, and horsehair sutures were hung on a gas-bracket. However, one does not hear of surgeons operating in the bloodstained frock coats which used to be worn in London. Notwithstanding these drawbacks, much first-rate pioneering work was done in surgery, chiefly, as has been noted, by Batchelor and Maunsell.

The lectures were given and the laboratory work done either at the University, which was half a mile away from the Hospital, or at the Museum, which was halfway between them. There was only one lecture theatre, and its use by a number of lecturers for several classes was, of course, often unsatisfactory. Scott's views on his dissecting room have been recorded.

New Zealand-born students had naturally known no other conditions and made them do; their crudity must, however, have been manifest, and no doubt odious comparisons were made with the conditions at Edinburgh and elsewhere, but it should be remembered that things as they were in the medical schools in Great Britain in the 'eighties would leave a good deal to be desired by any students of half a century later.

Numbers, of course, were small; the medical students, being of necessity employed "whole time," were something of a corporate body, and to that extent withdrawn from the rest. There were no organised games, at any rate in the early part of this period, and men keen on football played for one or other of the town clubs; there was a lawn tennis club, with its own court.

The majority of the students of the time, whether they qualified at Otago or in Edinburgh, ultimately settled in New Zealand, and they practised all over the country. Higher qualifications and diplomas were less sought after than was the case later, and there are few records of Fellowships of the Royal Colleges. Notable exceptions are Dr. Christie, above mentioned, and Dr. W. W. Griffen, both of whom were F.R.C.S. (Eng.), and particularly Sir Louis Barnett, F.R.C.S., who afterwards held the Chair of Surgery at Otago. Dr. W. J. Mullin became F.R.C.S.I.

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CHAPTER IX

1891 — 1904

THE FACULTY OF MEDICINE, DR. SCOTT, DEAN HOSPITAL RENOVATION

As has been noted, in its early days the University contained *Faculties* of Arts and Law and a *School* of Medicine. On 10th January, 1891, Professor Scott addressed a letter to the University Council, which is no longer extant, but which led to the appointment of a committee of the Chancellor, the Vice-Chancellor, the Treasurer, and Mr. James Allen, who were to confer with Professor Scott and Dr. Coughtrey (then Chairman of the Hospital Staff) and with the Hospital Trustees, on the organization of a Faculty of Medicine, and then to report to the Council.

In March the Council decided to establish such a faculty, which was to consist of the University professors and lecturers associated with the Medical School and the members of the Hospital staff who gave lectures to students. The government was to be vested in the Dean, who was to be appointed by the University Council; the Sub-dean was to be the Chairman of the Hospital staff for the time being.

The functions of the Faculty were to regulate the attendance of the professors and lecturers and to deal with matters of teaching in general, with the approval of the Council, and, so far as the Hospital was concerned, with that of the Trustees. *Inter alia*, the roll was to be called at the beginning of every class, in order to secure the punctuality of professors, lecturers, and students.

The Trustees gave their assent to the plan.

The original members of the Faculty of Medicine were Professor Scott (Dean), Professors Shand, Black, and Parker; Lecturers, Drs. Colquhoun, Ogston, Batchelor, John Macdonald, Roberts, Ferguson, de Zouche, and Truby King; also Drs. Stenhouse, Coughtrey, Barnett, Gordon Macdonald, Davies, Jeffcoat, Brown, Closs, and Macpherson, all of the Hospital staff.

The first meeting was held on 28th April, 1891, when a letter from the Registrar was read which set forth that the University Council had formally established the Faculty and had appointed Dr. Scott to be Dean for three years. Dr. Ferguson immediately afterwards moved that the Dean be elected by the members of the Faculty and not nominated by the Council, which was carried. In due course this was acknowledged by the Council, which affirmed that the Dean had

been appointed for three years, but expressed its willingness to hear from the Faculty when the next vacancy occurred.

The Dean and Drs. Colquhoun and Coughtrey were appointed a committee to draw up rules for the conduct of business and for the management of the Medical School; the rules provided *inter alia* that the Faculty should deal with all Medical School matters, subject to the approval of the Council and the Trustees, and that all communications with either body should be made through the Dean. The rules were approved by the Council.

The Faculty was to allot dresserships and clerkships in the Hospital; the students' work was to be considered every three months, and written reports thereon were to be rendered. Certificates of Hospital attendance were to be signed by the Dean. The Faculty approved the time-table of attendance of the Hospital staff submitted to it. It may be noted that house surgeons were in charge of the Out-patient Department, but that on Tuesdays and Fridays cases of interest therefrom would be "dealt with" by the honorary staff, and that the Casualty Department would be used for teaching as opportunity arose.

The following course of study was approved:—

1st Winter Session:	Biology, Physics, Inorganic Chemistry.
1st Summer	„ Preliminary Hospital Instruction.
2nd Winter	„ Anatomy, Chemistry. (Intermediate Examination.)
2nd Summer	„ Materia Medica, Surgical Wards, Post-Mortem Examinations.
3rd Winter	„ Anatomy, Physiology, Surgery, Surgical Wards, P.M. Examinations. (First Professional Examination.)
3rd Summer	„ Materia Medica, Pharmacy, Gynæcology or Midwifery, P.M. Examinations.
4th Winter	„ Physiology, Pathology, Practice of Medicine, Medical Wards, Out-patient Department, P.M. Examinations, Midwifery Practice. (Second Professional Examination.)
4th Summer	„ Midwifery or Gynæcology, Ophthalmology, Children's Diseases, Vaccination, Insanity, Eye Wards, Gynæcological Wards, Diseases of Skin, Out-patient Department.
5th Winter	„ Surgery, Practice of Medicine, Medical Jurisprudence, Public Health, All Departments of the Hospital. (Third Professional Examination.)

Materia Medica, as may be seen, was taken in the second summer, and it was decided that the students should not take Pharmacy before they had had this instruction, which, in the opinion of the Dispenser, constituted a "grave danger." The Dispenser also had the courage to refuse to sign up students as "fully competent," he would only certify that they had "regularly attended" for instruction. This was a new dispenser; his predecessor, Dr. Brown, "a dear old eccentric teacher," had served for twenty-six years, and was a well-known character about the Hospital.

However, instruction was still felt to be incomplete, and in July Dr. Coughtrey moved in the Faculty that there should be instruction, examination, and the grant of a certificate in the administration of anæsthetics.

The Faculty did not stop at the arrangement of the course, and in July Dr. Ogston moved that it should regulate the details of clinical and other examinations for degrees. Further still, an Otago University Representation Bill was before the House of Representatives, and Dr. Ferguson moved in the Faculty that one-third of the members of the Council should be nominated by the Government, one-third elected by the graduates, and one-third (a greatly increased proportion) by the teachers. This was forwarded to Mr. Hutchison, in Wellington, who wrote in his acknowledgement that he thought the Faculty was asking too much.

Soon after its formation the Faculty of Medicine was granted permission to hold its meetings in Dunedin Hospital during the pleasure of the Trustees.

In the Hospital Report for the year 1889-1890 an event is recorded which had very far-reaching results, and these began to be apparent during the period now under discussion.

On 22nd July, 1889, Dr. Batchelor reported that two patients under his charge had suffered from septic poisoning after trifling operations, one of whom had died. Her death was, in Dr. Batchelor's opinion, "entirely due to unhealthy Hospital Influences, and if she had been operated on in a healthy ward, with healthy surroundings, she would be alive and well." He demanded an immediate and most searching investigation by the Trustees. The latter resolved on a public enquiry, and Dr. Batchelor was asked to make no further statement until it took place. The Government was requested to send a special commissioner, and later an application was made for a Royal Commission, which was granted.

Sir James Hector and Mr. E. H. Carew were appointed; they sat from 20th August to 13th September, and examined twenty-five witnesses and many documents. Mr. Saul Solomon appeared for Dr. Batchelor, and Mr. F. Chapman for the Trustees, who afforded every facility.

The report of the Commission amounted to a very severe condemnation of the whole Hospital, including the site, the plan of construction, the system of ventilation, lighting, and heating, the floors and walls, the

state of overcrowding, the drainage, the closets, baths, and lavatories, the lack of special wards and special case rooms, the inadequate nursing, the kitchens, the lack of convalescent wards, and the general sanitary condition.

Commenting on this position in later years, Dr. Colquhoun remarked: "We could not say to students, 'Here in the Hospital you see how things should be done.' We had to say, 'Here you see how typhoid and pneumonia cases should not be treated, conditions under which operations should not be performed.'" And he went on to record the opposition of the Trustees to the staff. But still he concluded: "I wish to place on record what I think the Medical School owes to the Trustees. They were straightforward in their opposition, but when they found that we only wanted an efficient Hospital instead of an inefficient one they recognized that it was as much their business as ours to secure this. They were slower to see that the Medical School meant a higher standard of professional skill, with costlier appliances as a necessary adjunct, but in time they saw this also." These remarks were part of an address given in 1910.

After the publication of the Commission's report the Trustees admitted that there were defects in their building, which had not been designed for a hospital. They decided to build new wards on the pavilion system on their existing ground, and to use the old building for Administration, Out-patients, Dispensary, and so on. For this they asked for £10,000, and the Campbell Pavilion was built and named after Mrs. Robert Campbell, a benefactress. It contained Miller and Houghton Wards, named after two chairmen of the Trustees.

After much enquiry it had been decided to employ female nurses, under a Matron, throughout the Hospital, and to build a Nurses' Home as soon as funds permitted. This home was finished in 1891. In his report of this year Dr. MacGregor, by then Inspector of Hospitals, wrote of "this hospital in its natural position as the head of the hospital system of the Colony; its position as the centre of our medical education system gives it an importance belonging to none other of our institutions." The report of the Royal Commission had nevertheless serious repercussions for the school.

Dr. Batchelor had finished his year of duty on the Hospital staff in 1890, and in view of his evidence before the Royal Commission he resolved not to seek reappointment till the necessary improvements had been completed. However, he sought and obtained a seat on the Board of Trustees in 1892, and served on the Building Committee. He went Home on leave in the following year, and was reappointed to the staff after his return. The Trustees appear to have had no personal animus against him.

Early in 1891 Dr. Maunsell applied for leave of absence, which was granted. The occasion was to prove of some importance, since it led to the first appearance on the teaching staff of Dr. L. E. Barnett, who had recently returned from England with the Edinburgh M.B. degree

and the F.R.C.S. (Eng.), and was at this time appointed *locum tenens* for Maunsell as Lecturer on Surgery.

Later in the year Dr. Maunsell resigned on account of ill-health, and William Brown, L. E. Barnett, and Philip James became candidates for the lectureship. Barnett, in his application, recognized Brown's claims, but desired to declare his ambition of becoming a teacher of Surgery. Dr. Brown was reappointed, Barnett was thanked for his services as *locum tenens*, and the hope was expressed that he might be employed later.

Dr. Maunsell, in his letter of resignation, wrote, as follows: "Since my arrival in England I have seen a large number of New Zealand medical students. Without exception they are all progressing remarkably well with their studies. They work so hard and conduct themselves so well that they have gained golden opinions from the professors and lecturers of the various medical schools where they are prosecuting their studies."

As an instance of this the honours list of the previous winter session at Edinburgh may be quoted. This contained the names of ten Otago students, of whom five obtained first class honours. They were the following:—

J. A. Fullarton	....	Institutes of Medicine, Medal and First Class; General Pathology, Medal and First Class.
G. Home	....	Materia Medica, Medal and First Class; General Pathology, Medal and First Class; Practical Anatomy, Gold Medal and First Class.
J. B. Thomson	....	Practical Anatomy, First Class.
R. H. Makgill	....	Systematic Surgery, First Class (juniors)
W. Fitzgerald	....	Surgery, First Class; Principles and Practice of Medicine, Medal and First Class.

This is, of course, a very good record, but naturally there was another aspect of this way of education. To send boys ten thousand miles away from their homes to a place where many of them could come under no domestic influence whatever was to take a considerable risk, and in expansive moments any old Edinburgh student of the period would refer regretfully to the number of his contemporaries who "went to the pack." There have been great advantages from the opportunity and from the establishment of the custom to complete the course in New Zealand.

During 1891 the question of the attendance at Hospital and qualification of women medical students was settled once and for all. Women students were admitted to all University classes, but the question of admission to the practice of the Hospital had not so far arisen. In March, 1891, Miss Emily Siedeberg wrote to the Council to ask if she could take a degree in medicine; the Council replied that

there was no objection to her doing so. In May she wrote to the Hospital Trustees to ask if she might attend classes at the Hospital. and they replied that if the University Council had no objection they had none. Her application certainly went the rounds, it was apparently sent on by the Trustees to the Hospital staff, who sent it on by their secretary to the Faculty of Medicine. Miss Siedeberg completed the course, qualified, and practised for many years in Dunedin. A contemporary of hers was a Dr. Margaret Cruickshank, who practised in Waimate, a small town about 100 miles north of Dunedin. She died in the influenza epidemic of 1918-19, and such was the opinion held of her that her statue was raised to commemorate her services and stands in the township. Surely a rare tribute to a practitioner of medicine.

Mr. "Wullie" Goodlet, a former laboratory assistant to Dr. Black, wrote the following note when asked for his recollections of early days:—

The Medical School had started with a few students. Mr. Jefferson, the porter, or "corpses' friend," as the students called him, had a very unpleasant duty, looking after the bodies and pickling them in the cellar and carrying them up two flights of stairs to the dissecting room. I gave him all the assistance I could . . . The students used to come down and bounce me on the floor, take nearly all the clothes off me, tie my legs and hands behind my back, and carry me up to the dissecting room and put me on the table and leave me there alongside a corpse. They would then lock the door and clear out. Jefferson would let me loose and ask who brought me up there. It was nothing for the students to come downstairs with an arm or a leg, and chase me all over the chemical laboratory. It was good fun for them and I had got used to it. The medical students in those days had more liberty than now, and they made good use of it. For my part, it was all taken in a good feeling. They were all fine fellows and good students. . . . The first lady was Miss Tracy . . . she did not get any encouragement from Dr. Scott at the time, and did not have any one to back her up . . . she was very much disappointed at not entering the Medical School . . . Miss Siedeberg was the first lady to take the medical course, and I must say she deserved great credit for the way she stuck to her work in the dissecting room. She had a very unpleasant time among the male students. They did not want lady doctors. I am speaking as one who knows all about it, and the lady students have to thank Miss Siedeberg for her pluck in making way for them. Miss Cruickshank joined Miss Siedeberg later on, and things went on much better. I had to have hot water and chloride of lime ready every day, by Professor Black's order, for Miss Siedeberg to wash her hands and face. The young men would throw the flesh at her every chance they got.

Happily, the personal recollections of Miss Siedeberg, later Dr. Siedeberg-McKinnon, were of a less unpleasant nature. She wrote: "When I first called on Dr. Scott, in December, 1890, whatever his private feelings may have been, he raised no objections to my taking the medical course, but let me understand very clearly that it rested entirely with myself as to how the medical students would behave towards me. Only once was there an incident, when a few small pieces from a neighbouring dissecting table were thrown in my direction, but Dr. Scott was a fine disciplinarian, and when he became aware of it, and spoke to the students, it was never repeated.

"No separate classes were held, but two of the anatomy lectures were delivered to myself alone, I having been asked to absent myself from the class.

"In rapid succession after Miss Cruickshank, who qualified in 1897, came Constance Frost, Alice Woodward, then Daisy Platts, Eleanor Baker, Winifred Bathgate, Emily Ridley, Jane Kinder, Ada Paterson, Ina Ingleby, Catherine Will. Some of these are dead, others married."

After graduation Dr. Siedeberg studied Obstetrics at the Rotunda Hospital, Dublin, and in Berlin, and on her return to Dunedin was Medical Superintendent to the St. Helens Maternity Hospital for thirty-three years, besides holding other appointments.

During the 'nineties there was clearly some dissatisfaction with the Medical School, and in 1891 a deputation from the Hospital staff presented a letter signed by all its members to the University Council asking for an enquiry into the charges made against them. Drs. Colquhoun, Ferguson, and Ogston addressed the Council. This apparently led to a meeting between a committee of the Council and the teachers, the latter admitted that the clinical teaching was unsatisfactory, but stated that this was not due to any individual teacher. They denied that "plucking" in the examinations was excessive, this, one must assume, had aroused complaint, and it was hoped that the rules propounded by the Faculty of Medicine would prevent the "occasional irregularities" which had hitherto occurred. A difference of opinion among examiners is noted below.

During this year the Council asked all professors to prepare catalogues of all the apparatus in their departments; this Scott, who found that he had quite sufficient calls on his time, flatly and characteristically declined to do.

Prizes were established in the Medical School for Anatomy and Physiology, Medicine and Surgery, and for the best student in each of the first, second, and third years. A prize was also given in Ophthalmology and perhaps in other subjects.

An important advance during 1891 is indicated by a request from Dr. Roberts, Lecturer in Pathology, for apparatus to teach Bacteriology. He wrote: "This is now an important branch of Pathology, and it is essential that students should become practically acquainted with the leading methods which are now being taught in most schools

of medicine." The request was supported by Scott. Later on, in 1897, Dr. Scott suggested that the Government Veterinary Officer, who was engaged in bacteriological research, should demonstrate to students and conduct his researches in Dunedin, in Dr. Ogston's Public Health laboratory; one does not know if this was ever done.

In 1892 instruction in the administration of anæsthetics was introduced, as Coughtrey had recommended. The Faculty obtained the permission of the Trustees to use for clinical teaching the Benevolent Institution, which was an old people's home, with infirmary attached, later known as the Talboys Hospital.

In this year, too, Dr. William Brown presented to the Medical School a complete set of large plates, fifty in number, published by the Sydenham Society. Dr. Maunsell also presented models.

The Council was invited to send a representative to the Eleventh International Medical Congress to be held in Rome in 1893, surely a handsome recognition of the school in its then state of development. Dr. Colquhoun, who was to go Home on leave, accepted the honour of representing the University in becoming terms. However, the Congress was postponed for a year "on account of the existing condition of the public health necessitating the Governments of the European Powers retaining the services of their medical men." Dr. Barnett acted for Dr. Colquhoun during his absence.

In this year there was ventilation of two serious grievances which were felt by the Faculty of Medicine, there were (1) the relations of the Faculty with the Trustees in regard to appointments to the Hospital staff, and (2) the appointment and the salaries of the lecturers; doubtless the latter was also felt by other Faculties in the University.

To take the matter of the lectureships first, this arose out of the findings of a committee of the Council, and contained two points to which the Faculty of Medicine took exception. These were the tenure of appointments and a reduced remuneration. As to the latter, the University was financially in very low water, and on 6th June, 1892, the committee recommended the salaries to be paid in future to the lecturers in the Faculties of Law and Medicine; those in the Faculty of Medicine were to be £125 and £75, and the lecturers on Diseases of Children and on Ophthalmology were each to receive only an honorarium of £25. Dr Ferguson indicated that he was quite willing to lecture in an honorary capacity, as hitherto, but he declined to estimate his services at £25, which did not cover the fees lost during the time given to the lectures. The Faculty objected to the whole proposal, and the matter was referred back to the committee. Their grounds of objection were set out in a letter written by Scott and signed by the lecturers in the Faculty:—

University of Otago,
18th June, 1892.

Gentlemen,

The regulations adopted at the last meeting of the Council relating to the appointment and salaries of lecturers in the University will, we are convinced, prove most injurious to the Medical School.

UNIVERSITY OF OTAGO MEDICAL SCHOOL

Under the conditions which have held hitherto the term of office was for three years, but there was a tacit understanding that unless for some good reason the appointments would run on from term to term. It is now proposed to advertize the lectureships as vacant at the end of each triennial period, and the old lecturer must apply like anyone else if he wishes to be reappointed. This means that out of a staff of ten teaching the purely professional branches of medicine, nine would have a very short and insecure term of office.

It is no doubt because you believe that better work will be done under the new system that you have made the change. We, on the contrary, hold most strongly that the reverse will be the case. We are confident that nothing but harm will result from insecurity of tenure. No one will give you his best work if he feels that at the end of three years much of his labour may be lost or go to help someone who has supplanted him. Much extra time is given by a conscientious teacher to the tedious labour of preparing diagrams and specimens for his class, things of the utmost value to him as a teacher but useless otherwise, and this you can hardly expect anyone to do under the proposed new conditions. Nor is it to be supposed that a lecturer on one of those subjects that require a two years course will be inclined to take much trouble with the preparation of his lectures when the end of his term may have come before he has completed their delivery for the second time. The new scheme will take the heart out of the teachers and students will suffer.

But slipshod teaching is not our only fear. A succession of young and untried teachers will almost certainly result. You, as a Council, may not wish change, and will most probably be anxious to retain the services of your old lecturers, but we are certain that the triennial advertizement of the lectureships and the inadequate salaries offered must lead to constant change. It is not likely that the older and more experienced practitioners will care to submit to the conditions, and you will find that the applicants for the posts will be either men who have failed, or young men who wish to use the University as an advertizement, ready to sever their connection with it as soon as it has served their turn.

We do not care to say much about the reduction of salaries, but it is certainly hard that these should have been reduced twice in the seven years the school has been in existence. Two of us came out from Home to appointments advertized by you in England as worth £200 a year. In three years this was reduced by one-quarter, and now you have resolved on a second reduction.

The proposed rate of pay is not satisfactory. Men in good practice make nothing by the present salaries, which do not make up for loss of time. To beginners alone have the lectureships any money value, and this indirectly through the practice some of them may be supposed to attract. But even this is certainly not the case with all of them. The lectureships on Pathology, on Public Health, and on Materia Medica bring absolutely nothing in the way of practice.

Trusting that in the interests of your School of Medicine you will reconsider the matter referred to in this letter,

We are,

Your obedient servants,

(Signed) John H. Scott, D. Colquhoun, Wm. Brown,

W. S. Roberts, Frank Ogston, John Macdonald, F. Truby King.

The Council,

University of Otago.

This letter was referred to a committee, which recommended that appointments to lectureships should be for three years, to be renewable for similar terms at the discretion of the Council. All existing appointments were deemed to be for three years dating from 1st November, 1891.

Notwithstanding this, the University's loss of revenue was so grave that the reductions in salaries could not be avoided. Professors who lived in University houses were to be charged rent, and those who did not were to have their salaries docked by £100 a year. In the following year, 1892, Mr. D. White and Rev. Andrew Cameron met Dr. Scott and drafted a letter to the lecturers on the reduction of their salaries to £125 or £75 on the expiry of tenure. All accepted, except Dr. Brown, the Lecturer on Surgery. Dr. Batchelor accepted under protest, as did Dr. Ogston, who remarked that the teaching of Medical Jurisprudence brought him no advantage in practice.

The Rev. Andrew Cameron, afterwards Hon. LL.D. of Edinburgh, had been elected to the Council in this year, and the election was an important one for the Medical School. Dr. Cameron later became Chancellor of the University, and it appeared to him that the greatest service that he could render to it was to forward the interests of the Medical School, and under his Chancellorship its main advances took place.

There were perpetual committee reports and recommendations on the conduct of affairs. In 1900 the Professor of English, Chairman of the Professorial Board, reported as follows:—

. . . All branches of teaching are starved and undermanned. The library and the laboratories are very insufficiently supplied with books and teaching apparatus. . . . In the Medical School especially additional funds are most urgently required. Two lecturers have no salary at all, all the others have twice had to submit to reduction. Any new appointment, even at a small salary, would be injudicious and resented by the medical lecturers as unfair to themselves.

(Signed) T. Gilray.

With regard to the Hospital staff, the views of the Faculty are expressed in a "Memorandum for Dr. Stuart as to Hospital Matters," written by Dr. Scott on 20th April, 1892, which is preserved in the University correspondence files, and is as follows:—

The University looks to the Dunedin Hospital for the entire clinical teaching of its medical students.

This has been one of the functions of the Hospital for, I think, fourteen years, and if it is not properly discharged, the Medical School must be crippled or ruined.

The University has, however, no voice in the election of the Board of Trustees. This, the Governing body, is chosen entirely by those who regard the Hospital as a place for the treatment of disease.

Though this is the main function of the Hospital, it is not the only one, and this seems to have been lost sight of when the present mode of election was adopted.

UNIVERSITY OF OTAGO MEDICAL SCHOOL

From the University point of view one of the most important duties of the Trustees is the appointment of the medical staff. As matters stand the University has no guarantee that its interests will be considered in making these appointments.

As a matter of fact, the necessary appointments have always been made, but no guarantee for the future can be given, as the Board is elected annually.

It has been stated that the University wishes to make all the appointments.

This is not the case. What the University does ask is this: That its lecturer on Surgery and its lecturer on Medicine be ex-officio members of the staff, that its lecturer on Pathology be Pathologist to the Hospital (no beds are asked for in this case); and it also says that it is very desirable indeed that its teachers of Diseases of Women and of Diseases of Children should have beds.

Supposing all these requests are granted, there are still *six* appointments to be made.

As to the number of patients in the Hospital, I would just say this, that if the statements we hear made are true, and if the number cannot be increased, we cannot go on. To do so would not only be deceiving the New Zealand public, but would be behaving dishonestly to the Royal Colleges of Physicians and Surgeons in England.

What can be done to put matters right is not very clear, but I would suggest that as a first step a meeting should be arranged between the Board of Trustees and the University Council. Our difficulties could then be discussed, and some remedy might be suggested, and even if nothing very practical should result we are much more likely to gain the sympathy of the Trustees in our efforts to save our school by so doing, than by leaving the expression of our grievances to irresponsible individuals.

It is a little remarkable that there is no reference to this subject in the minutes of either the University Council, the Professorial Board, or the Faculty of Medicine, nor in the Hospital report for the year; nothing seems to have been done.

It is difficult after half a century to get any very clear idea of the relations between the Trustees and the Medical School. The Hospital reports always refer very correctly to the services of the Honorary Staff, and there seems to have been no malice borne even against Dr. Batchelor, in spite of the great expense to which he had put the Trustees. The Hospital report of 1891-92 quoted with apparent approval the designation of their institution noted above as "the centre of our medical educational system." In the first by-laws of Dunedin Hospital, which followed the passage of the "Hospitals and Charitable Institutions Act" of 1885, and were made and put into operation in 1886, the declared establishment of the Hospital includes "A School for the Instruction in Medicine, Surgery, etc., of Students Attending the Otago University," and a section of the by-laws contained some fifteen paragraphs applicable to them. These prescribed not only their hours of attendance and their conduct, but the methods of case-taking to be used, the forms of certificates to be issued, and the scale of fees to be paid. These were: 1st year, £7 7s.; 2nd year, £5 5s.; 3rd year, £1 1s.; Special Medical Course, £3 3s.; Special Surgical Course, £3 3s.; 4th and subsequent years, £1 1s.; total, £21. These fees were payable in addition to the "class fees." It is to be noted that

throughout the University the staff did not accept fees from the sons of their colleagues. As to case-taking, in 1893 the Edinburgh case-taking sheet was introduced in the medical wards.

However, the following can be extracted from existing records: In December, 1893, as quoted in full below, Scott referred with resentment to recent action of the Trustees, more especially to their refusal to put Dr. Colquhoun, lately returned from leave, on the staff for the coming year, and he urged the importance of the University securing permanently its needs in the Hospital.

There was also serious falling off in the number of students, for which Scott did not spare the Hospital Trustees:—

University, Dunedin,
26th December, 1893.

Sir,

I have the honour to submit the following report on the condition of the Medical School during the present year. The number of students attending the various classes is as follows:—

(inter alia.)

Summer Session, 1892-3.		Winter Session, 1893.	
Materia Medica	6	Physics, etc.	22
Diseases of Children	2	Anatomy	16
Diseases of Women	0	(Others omitted.)	
Diseases of Eyes	0		

You will observe that no lectures were given in some classes owing to there being no students. The reason for this is the great falling off in the numbers of first-year students which occurred a few years ago at the time of the enquiry by a Royal Commission into the state of the Dunedin Hospital. Then the Hospital was so utterly condemned that the number of patients was most seriously reduced, and as a result the entries of students fell almost to zero, and each of the classes has suffered in its turn. I am glad, however, to be able to inform you that this wave of depression is passing away. A splendid addition has been made to the hospital buildings, and the number of patients is now fairly sufficient. The number of first-year students has, I believe, in consequence of this become as large as it has ever been, the two classes which lapsed last summer are now being held; and next winter every class will have its due supply of students.

To show the contrast between last summer and the present let me give you the attendance of the classes now at work.

Materia Medica	17
Midwifery	4
Diseases of Eye	3
Hospital Clinical Work	23

(He referred to the increase in the Museum and the co-operation of the medical men in the town.)

... I must point out to you in all seriousness that the recent action of the Trustees of the Hospital, more especially their refusal to give your lecturer on the Practice of Medicine, the necessary opportunities to teach his subject will severely cripple the school next year, and that unless some steps are taken to secure permanently to the University what it requires in the Hospital the School of Medicine will surely become a sickly sham.

(Signed) J. H. Scott, Dean.

The Chancellor.

UNIVERSITY OF OTAGO MEDICAL SCHOOL

There is an unsigned typewritten letter in the University correspondence, dated January, 1894, which pointed out the disadvantage of teachers being changed, and the importance to the University of representation on the Trustees' Board. This letter contains a reference to a resolution of the New Zealand Medical Association, passed at a General Meeting in Wellington in 1892, to the same effect.

In May, 1894, Dr. Jeffcoat moved in the Faculty of Medicine that house surgeons should be relieved of duties in the Out-patient Department. In July Dr. Colquhoun moved for a change in the method of election and tenure of office of members of the staff, and in August the Faculty advised the appointment of an Assistant Physician and an Assistant Surgeon for out-patients. Elections to the staff were to be annual, but with re-election for five years certain, but not for more than fifteen years, except in the case of University officers. Persons who had served on the Out-patient staff were to be preferred in new appointments to In-patients. At the end of the year a deputation from the University Council met the Trustees to discuss Hospital appointments, but the latter declined to appoint a surgeon to Out-patients.

An immediate concern of the teaching staff was for an adequate post-mortem room, for which Professor Scott forcibly appealed in 1899:—

University of Otago,
1st May, 1899.

Gentlemen,

I am directed by the Faculty of Medicine to again impress upon you in the strongest possible terms the urgent necessity there is for a new post-mortem room at the Hospital. I do not know, however, that I can say any more than I have already said on more than one occasion, and I need only repeat that Pathology is the foundation of Medicine, and that it cannot be taught with the accommodation now available, that our present procedure is simply dishonest—dishonest to students to whom we promise a sufficient education and dishonest to those medical corporations at Home which accept our certificates.

I am,

Your obedient servant,

(Signed) J. H. Scott,
Dean of the Faculty of Medicine.

The Council,
University of Otago.

The honorary staff subscribed £20 towards the building.

Naturally there was some difference of opinion with the Trustees as to responsibility; they declined to do anything unless the Council paid £25, but in the previous year the Council had promised to pay £50, and the payment was asked for with some frequency, and the demand was increased up to £120. The Council ultimately gave £100 in two instalments.

There is a further letter in Scott's writing, undated, in the correspondence files of the University for 1897:—

University of Otago, Dunedin.

Dunedin Hospital. The Trustees still show themselves anxious to advance the interests of the school by all means in their power, and the Honorary Medical Staff continues cheerfully to render those services without which the school could not exist. A new operating theatre has been built. It is more conveniently situated than the old theatre, and is more suited to the requirements of modern surgery. A new post-mortem room is most urgently required.

Though the school is, on the whole, in a fairly satisfactory state at present, we must not shut our eyes to the fact that it is not making progress. Several of the classes are starved for want of money, and we run the risk of getting hopelessly behind the times in consequence. The teaching staff is also insufficient, there are but one or two medical schools in Europe or in the British Colonies in which the old-fashioned combination of Anatomy and Physiology in one chair is still retained. While in no school in the whole world, so far as I know, with the exception of ours, is one man expected to teach both these subjects without assistance.

I am,

Your obedient servant,

(Signed) J. H. Scott.

In 1901, Mr. Burns, Secretary to the Trustees, wrote to the Council that the Trustees had met a deputation from the Council which had asked them to do several things: 1. To unite with them in asking the Government to pass a Bill to provide that the Trustees and the Council should act as one body in the appointment of the Hospital staff. 2. To increase the number of the Hospital beds. 3. To appoint an Assistant Physician and an Assistant Surgeon for Out-patients. The Trustees, however (1) refused to abrogate the functions vested in them by the Hospitals and Charitable Institutions Act and the Hospital by-laws, and noted that they had already put the University lecturers on the Hospital staff. (2) They considered that the beds in the hospital, 125, were sufficient for the sick poor of the district. (3) They were willing to make appointments to the Out-patient Department, but they refused to erect a Maternity Ward, an Infectious Block, or a Morgue. The old Maternity Ward had been closed on the advice of the then Inspector of Hospitals, and the other things they considered unsuitable for erection on a hospital site. This letter concluded with an assurance of the Trustees' goodwill to the School, and their approval of it.

The Trustees also declined to build a sanatorium for cases of tuberculosis; this they regarded as the duty of the Government. Two were built later.

CHAPTER X

1891 — 1904 (Continued)

CHAIR OF PHYSIOLOGY

IN 1893 Dr. de Zouche resigned the lectureship on Diseases of Children, and by Dr. Scott's advice the appointment was not immediately filled.

Drs. Batchelor, Brown, and Ogston were chosen to represent the lecturers of the Faculty of Medicine on the Professorial Board.

In this year Dr. Batchelor asked the University Council to submit his name to the Hospital Trustees for reappointment to the staff. He pointed out that he had served on it for ten years, first as physician and then as surgeon; in 1886 he had become Medical Officer to the Gynæcological Department, which had been started at his suggestion. He had not sought reappointment in 1890, but had served on the Trustees' Board in 1891. He had been away in 1892 and 1893. He sought reappointment as a specialist, the only one in his subject in New Zealand. The absence of the teacher of any clinical subject from the staff of the Hospital was of disadvantage to the school. He had been lecturer on his subject for ten years.

Dr. Jeffcoat had been appointed in Batchelor's absence. In the Hospital Report for 1895-6 it is stated that the by-laws allowed of two honorary physicians to the Gynæcological Department, and both Batchelor and Jeffcoat were appointed, and served together till Jeffcoat's death in 1897.

No charge of undue satisfaction with the school could be laid against the Faculty of Medicine, to judge by the very frank statements of Professor Scott, and there is evidence of criticism from outside, with which later members of the Faculty will be familiar enough.

For all professional examinations two examiners have always been engaged, external and internal. The external examiner is a professional man practising elsewhere than in Dunedin, generally in some other city or town in New Zealand, occasionally, in later days at any rate, he has been invited to come from Australia. The internal examiner has, as a rule, been the University teacher of the subject.

In 1893 the External Examiner in Surgery was unable to carry out the work, and as a substitute a surgeon in practice in Wellington was appointed. There were six candidates, of whom one passed and two failed, and about these three the examiners in all subjects were agreed. The remaining three candidates satisfied all the examiners except the substitute examiner. Dr. Brown, the Lecturer in Surgery, considered

the surgical work of all of them satisfactory, and the examiners in the other subjects concurred, but the substitute examiner would not give way. The matter was reported to the Senate, which decided upon a fresh examination, and this was held in Wellington by a different board of examiners. The tests were searching, and all the candidates passed. Some appeals by the substitute examiner came to nothing. The North Island newspapers made a number of comments which were thought very hostile to the Otago school, but the records of its students at Home, and their good standing there, were quoted in rebuttal.

In 1894 the Wellington Branch of the New Zealand Medical Association appears to have issued a circular which condemned the whole Dunedin course, and the facilities available there. In reply to this a spirited defence was offered by J. O. Closs, of the Otago Branch, at that time a surgeon on the Dunedin Hospital staff. He sent a copy of his paper to the University Council.

J. O. Closs, M.D., had started at Otago and completed his medical course in Edinburgh, where he had been Senior Scholar in Human Anatomy and Physiology, and had taken first or second class honours in all subjects. He had served at the Carlisle Asylum, Cumberland, and at the Southland Hospital, New Zealand, before entering practice in Dunedin.

In December, 1893, the University Council considered a report on the Medical School, and a committee was appointed to wait on the Trustees to secure accommodation in the Hospital for clinical teaching.

In March, 1894, the Council considered documents signed by the President and Secretary of the Otago Branch of the British Medical Association, the Chairman of the Trustees, and the Chairman of the Senate Committee of the University of New Zealand, who were to take evidence and report on the Medical School. The findings of these committees were not available at the time of writing.

All this would seem to indicate a sense of dissatisfaction and a desire for improvement.

Meantime, in 1894, Drs. Scott and Barnett, Secretaries of the Inter-colonial Medical Congress to be held in Dunedin in 1896, asked and obtained the permission of the Council to hold it in the University Buildings.

Dr. William Brown having resigned the lectureship on Surgery, the appointment was advertised, and L. E. Barnett, F. H. Jeffcoat, J. O. Closs, and C. J. Shields, F.R.C.S., of Melbourne, were candidates. Barnett was elected, at a salary of £125 a year, and began his long course as official teacher of Surgery at Otago, first as lecturer and afterwards as professor. Dr. Brown was thanked for his services by the University Council.

Dr. Brown remained in practice in Dunedin for some years. He was responsible for initiating a movement to commemorate the Jubilee of Queen Victoria by the establishment of a Children's Block in the Hospital, consisting of two wards for medical and surgical cases. These were opened during the Hospital year, 1898-9. Dr. Brown was

thanked for his help in that connection, and when he left the city in 1903 the Mayor took occasion to recognize his distinguished services to the community.

In 1903 the staff asked for an X-ray plant, for a Tallerman hot-air apparatus, and for better accommodation for delirious patients and for cases of infection. In the following year Dr. Barnett was commissioned to obtain an X-ray apparatus in England, which was installed in Dunedin in 1904.

This was the period when falling rents, falling prices of wool, and the depredations of rabbits were most severely felt, and, as Dr. Colquhoun once put it, the University "staggered on for years with a steadily increasing burden of debt." It was impossible to keep the Medical School up to date, and prospective students went Home. An appeal to the public had to be made, and was well supported by the *Otago Daily Times* and the *Evening Star*. A Government subsidy was promised, and the public and private contributions came to £13,719 in two years; the University's overdraft was paid off, and it was left with some money in hand.

Attempts were still being made to obtain representation of the University on the Hospital Trustees. There was a proposal for a Bill on the subject in 1901, in which the Trustees declined to join with the University Council. The Council, however, did what it could, and in 1903 it passed a motion that if the Government were to introduce a Bill to deal with election to Hospital Boards, the Council should ask it to grant them a voice in the election of the Honorary Staff of Dunedin Hospital.

In 1904 Mr. James Allen indicated the wishes of the University Council to the Government in this matter, and the Council wrote to the Minister of Public Health and to the Otago members of Parliament to ask for their support, and also to the British Medical Association. The latter promised their help, but the Hon. W. Hall-Jones indicated that the constitution of the Hospital Board could not be altered without legislation, and one must assume that such alteration was not contemplated in the Bill.

A number of internal changes were naturally made during this period. In 1892 Dr. Scott acquired two rooms for his department which had belonged to the Mining School. At the end of 1900, on account of ill-health, Dr. John Macdonald resigned the lectureship on *Materia Medica*, which he had held for seventeen years. The Council accepted his resignation with regret, and appointed Dr. E. E. Blomfield in his place in 1901.

Certain Government scholarships for Maori medical students were established, and reports were called for "as to the probability of their future usefulness as doctors among the Maoris." Among the earliest of these were Dr. Peter Buck (Te Rangi Hiroa) and Dr. Tutere Wi Repa.

Dr. Peter Buck had a very distinguished career. His father was an Irishman from Armagh, and his mother was a full Maori of the Ngati Mutungi Tribe, of North Taranaki. His native name, Te Rangi Hiroa, is derived from that of an ancestor of two centuries earlier. "Hiroa" is a contraction of "Ihi-roa," and means "Heavens streaked with the long rays of the Sun." Dr. Buck gives this information in his book, "Vikings of the Sunrise." He qualified at Otago and took the M.D. (N.Z.), and later he was made Hon. D.Sc. (N.Z.) and Hon. M.A. (Yale). In his youth he was amateur long jump champion of New Zealand. In the War of 1914 he was M.O. to the First Maori Contingent, was promoted major, and awarded the D.S.O. He was sometime M.P. for the Northern Maori, and in Parliament he displayed to the full the native gifts of oratory. He was at one time Director of the Division of Maori Hygiene, and held other posts in Maori administration. He became a great Polynesian ethnologist, and was appointed Director of the Bishop Museum at Honolulu and Professor of Anthropology at Yale University.

Dr. Wi Repa was good enough to supply some particulars of his own origin and career. He wrote: "I am a member of three East Coast tribes—the Whanau-a-Apanui, Ngati-Porou, and Ngati-Kahungunu. All these tribes are of Toi origin, all claiming descent from the Pacific hero, Maui-Potiki, who is still remembered for his many exploits, the most outstanding of which was the fishing up of the North Island of New Zealand from the bottom of the sea. We say that Toi was a 'tangata-whenua,' or aboriginal, in the sense only that his section of the Polynesian race was in occupation before the general migration of 1350 A.D. The Toi people were not absorbed by the immigrants, nor did they lose their identity; on the contrary they absorbed the later invaders. The Toi contribution to Maori blood is proudly acknowledged, especially on the East Coast of the North Island, by the recognition of genealogies and land-rights from that source. The Apanui people are allied to the Arawa and Takitumu peoples of the great migration. Both the Apanui and the Ngati-Porou occupy a large portion of the eastern sea-board of the North Island, and have held their lands through the trying vicissitudes of the years for sixty generations."

Dr. Wi Repa continued: "I was born in 1877 in the Apanui Territory. At present I am living in the Matakaoa Country, under my Ngati-Porou rights, my father being of both Apanui and Ngati-Porou ancestry. My mother belonged to the Wairoa section of the great Ngati-Kahungunu Tribe.

"I went to school at Te Kaha in 1884. In 1885 I proceeded to Te Aute College under a Government scholarship, and in 1889 succeeded in obtaining a Te Makarini Scholarship. In 1899 I entered the Otago Medical School. After taking my degree in 1907 I served as one of the junior house surgeons at the Dunedin Hospital. I then took up medical practice amongst our people of the East Coast, where I still live.

"I entered into the life of the University with great zest. In 1906 I represented my faculty on the Executive of the Students' Association. On at least two occasions I captained the University football team on the field, and scored the try which enabled the University team to win the competition banner for the first time in its history. I was also an active member of both the cricket and tennis clubs.

"Looking back from this distance of time to that happy period of my life, one bright memory especially stands out against a host of receding impressions: it is the memory of kindness, courtesy, and friendliness amounting almost to kinsmanship, not only of fellow-students of my own faculty, but of the staff of the Medical School, which includes that of the Hospital, also of all city doctors and the professors of other faculties. The grateful memory of the hospitality of many city families, and the unswerving civility, regard, and respect extended to Dr. Buck and myself by people of every class in the City of Dunedin, I shall cherish to the end of my days. Such consideration, esteem, and goodwill made us feel that Dunedin was our home, and not a place of temporary sojourn. Truly class and colour distinction have no place in University life.

"I trust that Maori medical students of the future will read and ponder these words in their hearts."

The abolition of that Medical Preliminary Examination, of which so much was heard in the early days of the school, came under discussion. Apparently both the University of New Zealand and that of Otago held examinations, and the proposal was for the abolition of the local one. Scott thought it served a useful purpose, and advised its continuance.

Dr. Ogston proposed in the Professorial Board that lecturers, after ten years' service, should receive the title of "Professor." Something of this kind was ultimately done, but not till some years later.

Dr. Jeffery Parker died in 1897, and the Chair of Biology and the Curatorship of the Museum became vacant. Dr. Ray Lankester, Dr. S. H. Vines, both of Oxford, and Dr. G. B. Howes, of the Royal College of Science, were asked to advise on his successor, and they recommended Dr. William Blaxland Benham, D.Sc., London, afterwards Sir William, K.B.E. and F.R.S., who was at the time Aldrichian Demonstrator in the University of Oxford, and a leading authority on earthworms. Sir William held the chair for nearly forty years, and published about one hundred papers on biological studies in New Zealand.

There seems to have been some difficulty in securing attendance on clinical work, since in 1904 a committee of the Council and the teachers passed a resolution making it compulsory and urged the Senate to confirm this. Much the same had occurred in 1887; no hospital was to be sanctioned for students' attendance where clinical instruction was not given. In 1903 Dr. Barnett instituted a class in Practical Surgery.

In 1904 Dr. Truby King was on leave, and Dr. E. E. Fooks gave the instruction in Mental Disease; Dr. King returned in the following

year. The fee for the course, as for all others, was £3 3s., but as it only lasted twelve days the Students' Association protested; apparently the lecturer had on occasion been content with £1 1s. However, the Council decided to stand by their Calendar.

Another attempt to shorten the day's work for medical students was made in 1896, when a motion was passed in the Professorial Board "That in the interests of students attending the Medical curriculum of this University the Professorial Board be requested to arrange the time-table so that no lecture be delivered in this curriculum at a later hour than between 5 and 6 p.m." The Arts students objected to this, the old difficulty over Professor Black's Chemistry lecture had arisen.

In this year the first mention is made of a "special" medical examination for candidates who had failed at the regular examination, though it may have been earlier in existence. It was not regularized till some years later.

The Registrar of the General Medical Council asked for some information about the Medical Preliminary Examination. It appeared that in one year three candidates had passed and three had failed; the highest marks obtained had been 58 per cent., and the lowest to pass had gained 39½ per cent. Comparing this with the prize-winning records already quoted, one would think that students must have "come on" considerably during the course.

The regulations for the M.D. degree came in for some discussion at this time, as they did on many subsequent occasions. A Bachelor of Medicine of three years standing could proceed to the degree of M.D. on passing an examination and on the acceptance of a thesis written by him, which must contain original work. The subjects of the examination were purely medical, and the examiners were to be in Great Britain. The written examination was to consist of two papers, one on General Medicine, the other on one of a list of optional subjects, the Chest, the Digestive and Urinary Systems, the Central Nervous System, Diseases of Children, Midwifery, and Mental Disease.

The subjects for the M.B. degree were the following:—

Intermediate Examination	Biology, Physics, Chemistry (Inorganic and Organic), Practical Chemistry.
First Professional Exam.	Anatomy and Physiology.
Second " "	Materia Medica, Pathology, Medical Jurisprudence and Public Health.
Third " "	Surgery, Clinical Surgery, Medicine, Clinical Medicine, Surgical and Medical Anatomy, Midwifery and Diseases of Women.

Certificates were required of instruction in Anæsthetics and in Diseases of the Eye, and of three months Casualty Dressing.

During these years, 1899-1902, the South African War took place, to which ten contingents went from New Zealand. There was, how-

ever, no field ambulance, hospital, or other medical unit sent, and the only doctors serving were attached to combatant formations. Surgeon-Captain Eugene O'Neill, M.B. (N.Z.), who was afterwards on the staff of Dunedin Hospital, and who served with distinction in the war of 1914, was mentioned in despatches for gallantry in the field in South Africa. There is no mention of the campaign in any University record. Dr. A. R. Falconer, afterwards Medical Superintendent of Dunedin Hospital, served with the New Zealand Forces, and Dr. Frank Fitchett, afterwards Professor of Clinical Medicine, served with the Langman Hospital and in the field.

An important teaching advance made about this time was the institution of clinical tutors, to which the Trustees gave their consent in 1904, only preferring that they should be selected from the Hospital staff, and with the proviso that no patient's case should be demonstrated without the sanction of the doctor in charge of him. Dr. W. Marshall Macdonald, a distinguished French scholar, later M.D. (Edin.) and M.R.C.P. (Lond.), who had lectured for Dr. Colquhoun during his absence on leave, was appointed Tutor in Medicine, and Dr. F. Ratcliffe Riley, F.R.C.S. (Eng.), Tutor in Surgery. These appointments were made in the following year.

And now steps were taken to bring about another and most important advance. Dr. Scott, it will be recalled, never professed to be an expert physiologist. As the numbers in the school grew—in 1903 there were 63 students attending the hospital—the teaching of anatomy, unassisted as he was, must have taken all his time; moreover, the subject of physiology was growing in size and importance. But the University funds were very low, salaries were very small, and, as Dr. Gilray hinted in 1900, the lecturers were likely to resent any additional appointment.

However, in October, 1903, a "local" appeared in the *Otago Daily Times* on the subject of a Chair of Physiology, which had indeed been spoken of some months before. This came about through the action of Mr. Wolf Harris, formerly of Dunedin, and then resident in London, who in 1903 very generously executed a deed with the University of Otago by which he gave £2,000 to endow a Chair of Physiology. The income derived from this fund was to go towards the salary of the professor. This is interesting as being the first endowment ever received by the Medical School: it was followed by many others during the Deanship of Sir Lindo Ferguson.

At the end of 1903 the University Council was allowed three years in which to establish the chair. A committee was appointed, a subscription list was opened, and the money received was vested in trustees. On going into ways and means, the committee reported on the accommodation required, and submitted two alternative plans, which would cost £3,800 and £4,400 respectively. It was decided to extend the existing Medical School block, and the professor was later on given temporary accommodation in the Library of the Mining School and had the use of a room generally allotted to Professor Black.

The matter was to some extent complicated by a proposal to establish a Veterinary School in Dunedin, and the Premier, Mr. Seddon, wished the professor to be able to teach *Animal* as well as *Human* Physiology on that account. Scott made no difficulty about this. The proposal for a Veterinary School came to nothing, it was several times revived, but always without result.

The following resolution, platitudinous as it is, was probably intended to give the Medical Association's support to the new Chair: 2nd September, 1904, from the Hon. Secretary, Otago Section, New Zealand Branch, B.M.A.: "If the Otago Medical School is to continue to give a curriculum for medical degrees, the University Council, in order to keep pace with the advance in medical teaching, must devote its main energies towards strengthening the school."

The financial difficulty for the University was obviously very great, and a meeting was arranged with Sir Joseph Ward; the report of the meeting was taken in committee, but the Premier was asked to receive a deputation. Mr. James Allen and Mr. T. K. Sidey were seen by Mr. Seddon, who took the view (although he was not quite satisfied on the point) that the Government was committed to the support of the Chair, which would cost £1,500 a year.

Mr. Seddon placed the services of the Agent General at the disposal of the Council for the appointment of a Professor of Physiology, which was to be advertised in London, Sydney, and Melbourne. The instruction to insert the advertisement seems to have been dated 22nd November, 1904. It was inserted in the *Times*, the *British Medical Journal*, and *The Lancet*, and particulars of the appointment, which included some account of the University and the school, were sent to the Universities of Oxford, Cambridge, Edinburgh, Glasgow, and St. Andrew's, and to Trinity College, Dublin. The terms were similar to those for the Chair of Anatomy, and on appointment the professor-elect signed an agreement to discharge the "duties of Professor of Physiology and conduct classes in physiology and embryology and histology in the Medical and *Veterinary* Schools, at a salary of £600 a year and half fees." The appointment was "whole time," and nothing else was to be done without the consent of the Council; £200 was allowed for the purchase of apparatus.

It was now estimated that the absolutely necessary buildings would cost £5,000; Mr. Seddon promised £2,000 and confirmed this in the estimates of the Committee of Supply. On the strength of this the General Committee of the Endowment Fund asked the University for leave to draw £3,000 from this fund in order to get the Government grant. A telegram was sent to Mr. Seddon to indicate that the Wolf Harris money was not available for buildings; these depended on local money collected in Otago and held by trustees, and it was this money that the Government grant was needed to supplement.

A strong Selection Committee was appointed in Great Britain, consisting of Sir Michael Foster, of Cambridge, Professor E. S. Schafer, of Edinburgh, and Dr. Charles Martin, of the Lister Institute. There

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were eleven candidates, and those on the short list were Drs. Chapman, Cole, and Malcolm.

Dr. John Malcolm was elected. His presence was required in New Zealand at very short notice, but Professor Schafer urged delay, or the equipment for his first session would certainly be very defective; it was essential that he should superintend its manufacture. Dr. Schafer advised that he should visit the United States, where in the recently founded laboratories he would see newer apparatus than was accessible in England. Dr. Malcolm was practically required to start a new department.

Dr. Malcolm held his Chair for close upon forty years.

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CHAPTER XI

1905 — 1914

DEPARTMENT OF PHYSIOLOGY IMPROVED FINANCE TEACHING OF MIDWIFERY PATHOLOGY, BACTERIOLOGY, AND PUBLIC HEALTH DR. CHAMPTALOUP

ON 16th June, 1905, Mr. Wolf Harris acknowledged the information that Dr. Malcolm had arrived at the University. His son, Mr. Percy Harris, of Dunedin, had already been elected a member of the University Council.

Dr. John Malcolm came from Caithness, in the far north of Scotland, and spent several years as a pupil teacher before entering the Medical School of the University of Edinburgh. Here he had a very distinguished career as a student. He obtained first class honours in nearly all the University classes, with medals in Practical Chemistry, Physics, Practical Botany, Practical Anatomy, and Public Health. He won the Neil Arnott prize in Experimental Physics, the Grierson Bursary in Anatomy and Physiology, and the Vans Dunlop Scholarship in Pathology, Medical Jurisprudence and Public Health. The latter allowed him, after graduating M.B., Ch.B., with honours, in 1894, to accept an invitation from Dr. Rutherford, the Professor of Physiology, to undertake research in his laboratory. The results were embodied in a thesis for the M.D., for which he was awarded a gold medal in 1899.

When Professor Schafer succeeded Rutherford, Malcolm became one of his assistants, and later on Lecturer on Chemical Physiology, and most of his research was on kindred problems. He also worked for a time under Professor Zuntz in Berlin. When he became a candidate for the Otago Chair his colleagues of the junior staff at Edinburgh, assistants, lecturers, tutors, and the like, took occasion to send him a letter of good wishes, signed by twenty-seven of them.

In spite of the exacting conditions of his work in Otago, and the extremely limited staff allowed him, Dr. Malcolm kept some research in hand throughout his professorial appointment, and published a piece of work nearly every year. His chemical studies led him into problems of metabolism and nutrition, and, after their discovery, into the problems of the vitamins. His work was characterized throughout by the most meticulous accuracy and critical survey, the latter quality manifesting itself as a remarkable modesty.

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During this year, 1905, Dr. Scott reported: "Thanks to Government assistance, some much needed improvements have been carried out; the chief of them is the appointment of a Professor of Physiology, Dr. Malcolm . . . has been appointed to the Chair, and is now in charge of the department."

Dr. Malcolm undertook his duties, which must have been sufficiently onerous, with a complete absence of fuss. His demands were of the simplest, and only such as anyone must have preferred who was undertaking the management of a new venture of this kind. He described to the Council how he had laid out the money allotted to him for apparatus, and also his further requirements, to which he suggested that the interest from the Harris bequest and the students' fees should be applied. He asked for a trained mechanic, whose services were to be shared with the Physics Department, and he advised that electricity, which was soon to be available, should be installed as the motive power in the laboratories. He pointed out that the Council had omitted to provide any lavatory or other convenience in the department.

In 1906 Dr. Scott reported to the Education Department that he had eighty students, and that the Physiology Department and buildings were in working order and receiving the attention which was their due. The Pathological Department had been improved, as had the Anatomical Museum. A reading room, with teaching models, *would be* provided.

In 1909 a Military Committee was set up in the University, on which two members of the Professorial Board were to serve; one of these was Dr. Malcolm, and he commanded a Medical Students' Section of a Field Ambulance in the Territorial Force. In 1913 he was Chairman of the Professorial Board, the last medical man to hold that office for more than twenty years.

In 1910 Dr. Malcolm secured the services of Mr. Harry Manson as mechanic. Mr. Manson had worked for him in Edinburgh many years before. He became a most valuable member of the department, of the kind that every laboratory in Great Britain secures and retains when it can. His ingenuity, technical skill, and devotion to duty must have saved the department many times his salary, and his shrewdness and pawky humour have been of service and amusement to every one from the professor to the last joined laboratory boy. One would hesitate to say that Mr. Manson was unaware of all this.

Laboratory boys, paid student-demonstrators, reference books, and more room to work in were also the subjects of Dr. Malcolm's demands from time to time. He and Dr. Scott must have worked in very close co-operation, and in the rather frequent absences of the latter, whose health began to fail in later years, Malcolm acted as Dean and as the head of the school. This is recorded for longer or shorter periods in 1908, 1909, 1910, 1912 and 1913. He supplied the annual report on the school for 1913. Scott's long and vigorous letters no longer appear in the University correspondence.

The period described in the last chapter was remarkable for its extreme financial stringency; from 1905 onwards the monetary position certainly improved, though the school never lived better than from hand to mouth. Outside the school itself the improvement may be attributed chiefly to three men—the then Premier, the Rt. Hon. R. J. Seddon, Mr. (afterwards Sir) James Allen, and Mr. (afterwards Sir) T. K. Sidey. The two latter were Otago members of Parliament, and they are frequently recorded as being “about to see the Premier” on financial questions. Mr. Sidey concerned himself more especially with the Dental School, which was opened in 1908. Dr. Scott successfully opposed its establishment as a section of the Medical School.

Mr. Seddon's interests had been engaged over the Chair of Physiology in December, 1903, when a deputation had waited upon him and left him certainly impressed with the importance of the subject. In July, 1904, he had received another deputation, which pointed out that the University of Otago had hitherto asked for no public money, but had raised its own buildings and so incurred debt. This deputation had asked for an annual grant of £1,250 and for £2,000 out of the £5,000 required for new buildings. Mr. Seddon was sympathetic; he was convinced that more money was required, and he did not consider the demands made to be extravagant, though he realized clearly enough that other academic institutions would make similar demands. This was the first occasion on which the “national” character of the Otago Medical School received any emphasis.

Since then the Otago School has depended largely on Government grants, and the attitude of the Treasury to the school, and, indeed, to the University colleges in general, should be understood. The Treasury's attitude has never been this: “You are an excellent institution, and we are glad to give you so many thousands a year to help your good work,” but rather this: “You say you cannot meet your expenses out of your endowments and fees, we therefore will have to help you out. What is the irreducible minimum required to pay your salaries and other outgoings?” Answer, “£x.” “And what do you derive from your ordinary revenue?” Answer, “£y.” “Very well, then. We will give you an annual grant of £x-y, and if any additional income comes to you from new endowments or other sources your grant will be diminished accordingly.”

Thereafter the “national” character of the school was frequently emphasized at the University. For instance, in 1905, when a deputation of the Hospital staff waited upon the Trustees to press for the erection of a Medical Pavilion, Dr. Batchelor remarked that “they must recognize that the Otago Medical School was taking up an entirely new phase in its existence. In the past it had been merely a local or provincial medical school, but it was now becoming a colonial national institution, and the standard of the medical profession in New Zealand would depend very largely on how the teaching was conducted in the school in which their students were turned out.”

Throughout the correspondence of these years one is impressed with the activities of Mr. Allen in Parliament on behalf of the University in general and of the Medical School in particular. Thus in 1905, among communications to the University Registrar, one finds a telegram from Allen to say that £350 is authorized for the Medical School, and that the Otago members are to meet the Premier; information that Messrs. Allen and Sidey are to meet the Premier on the teaching of Midwifery, and that £500 for a Maternity Home are to be put on the estimates supplementary; a telegram to say that £2,000 are put on the Public Works estimates for the Physiological Laboratory; that Allen has hopes of getting a Bill down to make statutory the £2,000 grant to the University. In the following year there is a telegram from Mr. Seddon referring to a grant of £1,500 a year for "Mining and Medicine."

A few months later Mr. Seddon died. A great Prime Minister and a great imperialist, he was also one in whom Otago University and Medical School lost a very good friend, and who was the first public man to recognize their needs.

Sir James Allen, as he afterwards became, continued his good offices to both those institutions, and in 1909 he succeeded Sir Joshua Williams as Chancellor for three years.

Sir James Allen was educated at Clifton and St. John's College, Cambridge, where he rowed in the university boat. He sat in the New Zealand House of Representatives from 1887 to 1920, and was appointed Minister of Finance, of Education, and of Defence in 1912. He was Minister of Defence throughout the war of 1914-1918, an unbroken record which few Ministers of War or of Defence can have attained throughout the world. He was created K.C.B. in 1917, and G.C.M.G. in 1920, and was High Commissioner for New Zealand in London from 1920 to 1926.

After returning to New Zealand he sat for a number of years in the Upper House, and also became a life member of the Otago University Council, and was the last life member to be appointed. Among other things he interested himself in the welfare of the students; in 1912 he prepared a statement for Mr. Hogben, the Inspector-General of Schools, on the needs of the University, in which he drew attention to its debt of £10,000, and the interest due thereon, the pensions it paid to retired professors, and the prospective pensions to be paid to others, the deficits on various University undertakings, the increase in the number of students, and the consequent pressure on the Medical School and on the accommodation for Chemistry and other subjects, the need of further provision for Anatomy and Physiology, Chemistry and Physics, and the requirements, among many others, for cricket and football grounds for the students. These grounds were very long awaited; a proposal to drain Lake Logan, on the outskirts of the city, to provide them was made in 1913, and there, some fifteen years later, the grounds were at last made.

In 1908 the Chairman of the Professorial Board had indicated to the Council the need for a students' building, with gymnasium, reading room, assembly hall, committee rooms, cloakrooms, and lavatories. The medical students had already asked for improvements in their lecture theatre, which they found cold and draughty, and it was remarked that the classes in English met in the Physiology lecture room, and also that the classes were too big for comfort, health, or efficient work. Now, in 1912, a fund was started, well supported by Mr. Allen; the buildings were completed and opened by the Governor in 1914, and the main assembly room was designated "The Allen Hall."

Sir James Allen did not seek re-election as Chancellor in 1912 after his appointment as Minister of Finance. He was succeeded at the University by the Reverend Andrew Cameron.

The University was evidently far from flush of money, but it was better off than it had been. As early as 1905, when £1,450 of the special grant of £1,500 above referred to was paid, the salaries of the lecturers were restored to their previous not extravagant rate, and no doubt some heartburnings were relieved; also, the salaries of the Medical and Surgery Tutors were increased by £50 each. Still, in 1907 an attempt was made to obtain a grant from the Carnegie Corporation, since the University saw no prospect of obtaining from local sources a certain large sum required. The Corporation, however, did not assist works of this kind. Towards the end of this period, in 1914, the Inspector-General of Schools announced a further grant of £1,500 for the Medical School.

The Medical School being by now well established, and of a "national" character, several other schools with more or less associated interests were set up by the University. The Dental School was first discussed in 1905, and was opened in buildings close to the main University in 1908, with Professor H. Percy Pickerill, M.D., M.D.S. (Birmingham), L.D.S., R.C.S. (Eng.), as Director. Professor Pickerill in time obtained permission to operate at the General Hospital. Naturally the Dental School had many points of contact with the Medical School, Drs. Colquhoun and Barnett were made consultants to it, and several others of the staff held appointments there. Dr. Pickerill undertook to give a course of lectures on "Stomatology" to the medical students, for the not excessive fee of £1 1s. per head. However, the students objected to this as not specified in their schedule.

A School of Home Science, whose students attend several classes in the Medical School, was first discussed in 1909, and was opened in 1912, through the generosity of Colonel John Studholme. A School of Massage, with an eighteen months course, was opened in 1913.

Mr. Seddon had been very desirous of establishing a Veterinary School in Dunedin, and had required that the Professor of Physiology there should be able to teach the "Animal" aspect of his subject. There are numerous letters containing enquiries about this projected school. In 1905 the specialization grant to the University was refused by the Secretary for Education because the provision for the teaching

of Veterinary Science was inadequate. The course "was expected to begin," it was "expected next session," in 1910; £3,000 was at one time authorized for it, and several sites on which to erect it were considered. The subject was still under discussion in 1913, but the school never materialized, one may assume that the war of 1914 put a stop to the project. It was revived as lately as 1938, but without result; in any case, the war of 1939 would have stopped it.

The presence of the Medical School at Dunedin has thus, and quite naturally, led to the multiplication of special schools at that centre. This has by no means always been approved in the other centres, and attempts, more or less persistent, have been made to start a Medical School elsewhere. As long ago as February, 1876, a committee reported to Mr. Rolleston, Superintendent of Canterbury, on the establishment of a Medical School in Christchurch for the Provincial Government.

The report expressed the opinion that the Colony should provide education for the professions: a Medical School was desirable in Canterbury, and it would improve the professional qualities of the teachers of medicine. It noted that many colonial students were unable, on financial grounds, to go Home. A school would require a general hospital of 100 beds, with three physicians and three surgeons, apart from specialists. The report specified the lectures to be given in winter and summer sessions, and laid emphasis on the teaching of hygiene. Students must be matriculated, must have reached the age of 17 years, and must be of good moral character.

Christchurch Hospital had 120 beds, which were soon to be increased to 150. The Board of Governors was favourable to the scheme. Among the requirements specified were recognition by the British examining bodies and by the University of New Zealand. There must be access to the Botanical Gardens. There should be endowment by means of reserves, and transfer to Canterbury College was envisaged. Reference was also made in the report to an Anatomy Bill, an operating theatre, and a dead house, and also to a Board of Directors.

The remuneration of the staff was considered and a draft scheme of lecturers and their subjects for the four years study was drawn up, with their courses and fees, and a complete staff was suggested by name from the then staff of the Hospital, including physicians, surgeons, accoucheur, and ophthalmic surgeon. The report was signed by H. H. Prins, as chairman.

The *Otago Daily Times*, in an article on 22nd May, 1876, remarked that "the Medical Schools of *Christchurch* and Dunedin will soon be in operation," but a few days later, on 7th June, 1876, it discussed with disapproval the suggestion of founding a school in Christchurch. A year later this paper, by no means unduly favourable to the Otago School at the time, derided the Canterbury pretensions (12.3.77): "There is a so-called Medical School in the Cathedral City, but it has nothing to do with the University . . ." "We were told here that the Canterbury people were acting while we were only talking . . . and

that we should find ourselves nowhere in the educational race as far as a Medical School was concerned. The Canterbury Board of Governors has done just exactly nothing at all." The writer then reviewed the requirements of the licensing bodies. No Medical School was really established in Canterbury, though in 1890 Dr. Hacon, President of the Canterbury Branch of the New Zealand Medical Association, in his retiring address, advocated the assignment of reserves for the Medical Department of Canterbury College. He envisaged Chairs of Hygiene, Botany, and Chemistry, and the recognition of the Hospital as a teaching hospital by the British and Australian Universities. Students were to pass their first year there. This has in a sense been realized; the first year subjects can be studied in any of the four centres.

A less ambitious programme was under consideration in Wellington some twelve years later. The following letter is in the Otago University correspondence:—

5 Victoria Terrace,
Broughamhill,
Wellington.
May 28, 1889.

The Secretary,
Otago University,
Dunedin.

Sir,

Steps are being taken in Wellington to establish there a preliminary School of Medicine and Practical Science. In the event of these endeavours being successful, it will be desirable for such studies as may be made at the institution to receive recognition at the hands of the Otago University as satisfying a certain portion of the curriculum. I am therefore writing to enquire whether, provided proof be given that opportunities for practical instruction in Anatomy, Histology, Physics, Chemistry, etc., are afforded by the Wellington School, the Otago University will recognize its teaching as exempting from, say, twelve or eighteen months of its own medical course.

Any suggestions the Otago authorities may make as to the subjects in which they more especially wish junior medical students to be well grounded would be gladly received and carefully considered.

It is not desired to trespass for one moment on the established position of Dunedin as the university centre of medical education, but to afford opportunities to local (Wellington) candidates for the profession, who are at present unable to leave the district.

I am, sir,

Yours very faithfully,

(Signed) Edwin Wooton.

The Otago reply to this letter has not been preserved, and nothing further is to be found about a school in Wellington.

By far the most formidable competition came from Auckland. This city has a much larger population, and consequently a much bigger hospital and a greater variety of cases than Dunedin, and Auckland University College has always desired a greater share of the special schools than it has had, and for which it has been able to make out an excellent case.

In 1904 the Auckland Charitable Aid Board suggested that Auckland University College should establish a Medical Chair, and the opinion is commonly held, at least in the south, that it was rather the laymen than the medical practitioners of Auckland who desired to see a medical school there. Dunedin people have always agreed with an opinion expressed by Dr. Valintine, when Director-General of Health (26.3.1913) that it was much better to have one well-found institution in New Zealand than two ill-found ones, and they have never regarded the Otago establishment as sufficiently well found. In the same statement Dr. Valintine included the remark that it might be to the advantage of the Government to take more interest in the Medical School, since it was not impossible that in the future there might be a National Medical Service.

To return to the period under discussion. In 1909 the Faculty of Medicine had been asked for a statement of the needs of the school. It specified: 1. An endowment for books. 2. The appointment of a Librarian. 3. A new Dissecting Room. 4. An Examination Hall. 5. Increased Museum space. 6. Increased space for Physiology. 7. Clinical facilities for the study of Diseases of Children, Diseases of the Ear, Nose, and Throat, and Diseases of the Skin.

Nevertheless, when a motion in the Council by Dr. Church came before the Faculty in the following year it was decided that it was then premature to make special appointments, which should be deferred.

A similar statement of needs was made by the Faculty in 1912, with the rider that to attract the best teachers higher salaries must be paid. A conference was held with Mr. Hogben at this time, who must have been impressed, for in the following year he announced the need for increased expenditure of £1,100 on buildings and equipment, and of £1,350 for salaries. He touched upon the question of a second school.

The recognition of the need for increased expenditure is made manifest in a number of reports and statements throughout this period. In addition to those already mentioned, in 1913 the University Council again asked for a statement of the needs of the Faculty of Medicine, and Dr. Malcolm reported as follows:—

- A. 1. Accommodation for full Pathological and Bacteriological Departments. 2. Public Health and Materia Medica Rooms. 3. Enlarged premises for Anatomy, Chemistry, and Physiology.
(The estimate for Anatomy and Chemistry was £5,300 and that for Physiology £4,800.)
- B. A whole-time Professor of Pathology.
- C. Assistants to the Professors of Anatomy, Physiology, and Pathology.

In accordance with his custom, Dr. Colquhoun recorded on paper his dissent from these recommendations.

The new buildings for Pathology and Bacteriology were ultimately obtained and were opened in 1916. They led to a complete reorientation of the Medical School; they are described and discussed later.

On the clinical side, improvement seems to have been continuous. There was at first only the Campbell Pavilion of modern wards at the Hospital, but the Committee of the Staff mentioned above, which waited on the Trustees on 16th February, 1905, pressed for the erection of a *Medical* Pavilion, and emphasized the fact that medical and surgical cases were not separated. The *Evening Star* newspaper raised a fund for Hospital extension, and in 1907 the Medical Pavilion, containing the Dominion and Plunket Wards, was opened by His Excellency the Governor, after whose wife the latter ward was named. The pavilion is similar in design to the Campbell.

In 1910 the Hospital Board offered to make Dr. Colquhoun Consulting Physician to their sanatorium for tuberculosis at Pleasant Valley, Palmerston, with right of entry for clinical instruction (actually it was thirty miles from Dunedin, too far to be of any practical use for this purpose), and the Board also asked the Council to appoint an honorary consulting physician and bacteriologist to the Fever Hospital; Dr. Sydney Champaloup, of whom more later, was appointed.

The Board also asked the Council to nominate a co-operative member of the Hospital Committee of the Board. This was a Committee of the whole Board, but the co-operative member was not a member of the Board proper.

It will be recalled that Dr. Ogston once moved in the Professorial Board that lecturers of ten years service should be styled professors; this proposal came to nothing. In 1905 Dr. Church gave notice of motion in the Council that Drs. Colquhoun and Barnett should be made professors; this also came to nothing, but in 1909 Dr. Cameron moved in the Council that the lecturers, Drs. Colquhoun, Barnett, Roberts, Ogston, Batchelor, and Ferguson, should be made professors of their respective subjects, which was carried.

A note in the Council minutes of this year records the election of a New Zealander, Dr. Percy Herring, to the Chair of Physiology at St. Andrew's, with a remark on the appointment of a student from the youngest British to the oldest Scottish university. Professor Herring was a contemporary of Dr. Malcolm's at Edinburgh, and a decision of his to withdraw from competition for the Otago Chair had influence in determining Malcolm's candidature.

Other honours of this time were the election of Professor Benham to the Fellowship of the Royal Society, and of Dr. Colquhoun to that of the Royal College of Physicians of London. In 1908 Dr. Scott was elected to the University Council, and in 1913, only a few months before his death, to the Senate of the University of New Zealand.

In 1910 Dr. Hocken became Vice-Chancellor at Otago, also only a few months before he died. Thomas Morland Hocken has been mentioned as the first Lecturer in Surgery, though his appointment was not approved by the examining bodies. He served on the University

Council from 1884 till his death in June, 1910. He was the author of one of the most readable accounts of the settlement of Otago, under the title of "Contributions to the Early History of New Zealand," though its accuracy is disputed on a good many points. He received his medical education at Durham and in Dublin, and qualified M.R.C.S. (Eng.). He was for many years Coroner for Dunedin, where he practised.

He made a most valuable collection of "books, pictures, and other documents relating to Australasia," which was insured for £5,000, besides a large and important Maori collection. These were presented by Dr. Hocken to the public, and the University Council were appointed Trustees. The material was lodged in the Museum, and the "Hocken Wing," containing the Hocken Library, was built by public subscription to contain them. Dr. Hocken also left £10,000 to the University, with which the Hocken Lectureship on Anthropology was founded. His Maori material was for a time kept separate, but was later merged in the general Museum collection. Mr. Willi Fels, a prominent citizen, was closely associated with both projects.

In this year also occurred the deaths of Dr. Burns, an original member of the University Council, and of Dr. MacGregor, one of the first four professors and later Inspector of Hospitals. Dr. Blomfield, Lecturer on Materia Medica, also died in 1910, and was succeeded by Dr. Frank Fitchett, at a salary of £100 a year and fees.

In 1905 Scott had reported on the appointment of the Medical and Surgical Tutors, Drs. W. M. Macdonald and F. R. Riley, and on their valuable work. In 1907 Dr. Riley resigned, to become Assistant Gynæcologist, and he was succeeded as Surgical Tutor by Dr. William Newlands, who had been dux of the Otago Boys' High School and a Junior University Scholar, and was B.Sc. (N.Z.), M.B., F.R.C.S. (Edin.).

The duties of these tutors were specified as follows: In Medicine, systematic practical teaching in diagnosis and supervision of case-taking; in Surgery, bandaging, appliances, instruments, dressings, aseptic technique, and supervision of case-taking. Dr. Macdonald moved for two clinical lectures weekly in Medicine and Surgery, and stated that he was conducting a class in clinical medicine. The criticism of too much lecturing and too much laboratory work was heard, not for the last time, in 1909, when Dr. Macdonald moved that the fourth year students should do only clinical work between the hours of 9 and 11 a.m.

It was decided that no student was eligible to serve as surgical dresser or clinical clerk till he had attended the classes in Anatomy and Physiology. In 1909 the Faculty of Medicine pressed for more attention to be given to instruction in and attendance at the administration of anæsthetics.

In 1913 the membership of the Faculty of Medicine was extended to include the Tutors in Medicine, Surgery, and Obstetrics, the teaching members of the Hospital Staff, the Medical Superintendent of the Hospital, the Senior Anæsthetist, and the Radiologist.

The Medical Library was less fortunate than the Hocken. In 1905 Dr. Scott asked the Government for an annual grant of £50 for it, which was made in 1906. Most of the statements of the needs of the school included library requirements. In 1909 the Otago Division of the B.M.A. passed a resolution that it "should offer to co-operate with the University Council in its efforts to form a medical library; and that as a first step towards the attainment of this end should ask the Council to accept the volumes at present in the possession of the Association, on condition that members of the Association may have free access to the University Library. Further, that a small sum should be voted annually towards the extension of the library." Signed by W. Newlands, Hon. Sec.

In 1912 the Division is recorded as having paid £10 to the library, and this became an annual donation. In 1909 Dr. Alexander Paterson, of Wellington, offered his medical books to the School. But the library was still quite inadequate.

In 1911 Professor Barnett asked for an Assistant Lecturer in Surgery to relieve him of occasional lectures, Museum demonstrations, and the like, to be paid out of the professor's salary and fees. The Chancellor wanted to know how assistants to professors were arranged for in the other colleges. There were several applicants for the post, and Dr. Newlands was appointed. Dr. Sydney Allen succeeded him as Surgical Tutor.

During this year, 1911, the Faculty of Medicine appointed Medical, Surgical, Obstetric and Gynæcological, and Specialist (Eye, Ear, Nose, and Throat) Committees, which reported, with commendable economy of time, a month later as follows:—

Medical Committee.

Fourth Year: Wards, 9.30-11. One month in Hospital Laboratory. Two Clinics a week. A Medical Registrar to be appointed to supervise case-taking two days a week, 9.30-11. Clinical lectures by the Physicians in turn, the Assistant Physicians may act as substitutes.

The Physicians and Dr. Champaloup to give occasional clinics at the Fever Hospital.

Instruction in Children's Diseases to be given in the Wards and Out-patient Department, and to Fifth Year at Karitane, by the Visiting Physician.

Instruction in Skin Diseases in the Wards and Out-patient Department.

The Bacteriologist to give Out-patient Clinics on Vaccine Therapy, three attendances to be required of the Fifth Year.

Third Year: To attend the Medical Tutor for instruction on Physical Signs in the Chest.

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Fifth Year: Dispensary Practice in pairs under the Assistant Physicians, 10 cases to be attended.

House Physicians may relieve Assistant Physicians in the Out-patient Department one day a week. The Professor of Medicine responsible for the department.

Surgical Committee.

Three Senior Surgeons each to give 15 lecture-demonstrations a year, two Assistant Surgeons 5 each, Senior Anæsthetist 5; total, 60. Each in turn till complete.

Medical Superintendent to collect cases.

Assistant Surgeons to be in touch with Seniors, to act as Surgical Registrars to their chiefs, to supervise students, and to act as substitutes for their chiefs.

The three Anæsthetists to instruct students.

The Radiologist to do the same on request.

The Medical Superintendent to take students round in the evenings with the House Surgeon, for splints, catheters, etc. Arrangements to be made for telephone communication with Seniors. The Professor of Surgery to be the organising head.

Obstetric and Gynaecological Committee.

Midwifery lectures to be given every year in the first half of the Fourth Winter Session. Gynæcology in the Fourth Summer. Midwifery certainly every year, Gynæcology perhaps in alternate years.

Attendance at the Out-patient Department compulsory.

The Obstetric Tutor to have £50 a year (like Medical and Surgical Tutors).

Specialist Committee.

A regular course of instruction in Eye, Ear, Nose, and Throat work; arrangements to be suspended till the return of Dr. Ferguson from leave.

Professor Barnett, on his return from America, submitted the following report to the University Council:—

Our Medical School, with all its limitations and imperfections, compares favourably with the American Schools. . . . At Montreal and Toronto the medical departments are magnificently housed and equipped, but there is no great divergence in their curriculum or methods from our own . . . a smaller proportion of didactic and a correspondingly larger proportion of practical instruction is given, and the teaching is subdivided among a larger number of men . . . some modification of our

methods along these lines . . . will make for better practical results.

In regard to Hospital accommodation, I hold, and hold most strongly, that the Dunedin Hospital is a credit to this or any other city of like size. I know the Hospital too well to be blind to its defects, but I maintain that in the broad essentials requisite for . . . the treatment of the sick poor and the teaching of medical students it is a thoroughly well-found and progressive institution.

CHAPTER XII

1905 — 1914 (Continued)

OBSTETRICS

PATHOLOGY, BACTERIOLOGY, AND PUBLIC HEALTH DEATH OF DR. SCOTT

ONE may conclude that in Medicine and Surgery the Hospital and School were efficiently discharging their functions. With Obstetrics it was otherwise, and throughout this time the correspondence is full of the difficulties of finding the cases necessary for instruction in Midwifery, and how they were, in part at least, overcome.

It will be recalled that the Lying-in Ward at Dunedin Hospital had been abolished, and that a scheme had been drawn up, which was no doubt in operation, for attendance on parturient women in their own homes. There was also some unsatisfactory accommodation for such cases at the Benevolent Institution.

About this time was passed "The Midwives Act, 1904, An Act to Provide for the Better Training of Midwives and to Regulate the Practice of Midwifery." . . . Section 5 of this Act provided that "There shall be established in New Zealand one or more State Maternity Hospitals, where pupil nurses can be instructed." Section 21 provided that "The Registrar may cause any existing Public or Private Hospital . . . to be registered . . . as a State Maternity Hospital." This Act led to the establishment, in all the four centres and in some other towns, of the "St. Helens Hospitals," named after Mr. Seddon's place of origin in Lancashire. They were intended for the accommodation of married women at a very small fee, and though this is nowhere stated in the Act, medical students were not to be admitted for instruction.* It is easy to see that a great number of women would be glad to be confined in a proper lying-in hospital, when a cheap one was available in their own neighbourhood, and that consequently the number of midwifery cases accessible to medical students was likely to be seriously reduced, and so it was. The Premier was repeatedly requested to make an exception in the case of Dunedin; Messrs Allen and Sidey approached him; there is a draft of a letter from Dr. Hocken to him asking for arrangements for competent teaching of this important subject, Dr. Batchelor was to see him, and earnest consideration was requested. Dr. Hocken also brought the matter before the B.M.A., and the Premier was asked to receive a deputation when he came down to open the St. Helens

*Appendix II.

Hospital at Dunedin. Mr. Seddon, however, was quite inexorable; he refused to allow the use of St. Helens on the ground that it would destroy the purpose of the Home and make the institution unpopular.

There was, however, in Dunedin a Female Refuge, formerly conducted by a private charitable body, but which had then been disused for some years. This provided a way out of the difficulty, and permission for its use was proclaimed in dramatic fashion. When the Premier spoke at the opening of the St. Helens Hospital and declaimed in good demagogic style on the benefits thereby to be conferred, Dr. Batchelor rose in his place and asked what was to be done for the medical students. Mr. Seddon bade him go ahead with his own scheme, and promised him financial support. Dr. Batchelor asked if that was to be taken literally, and was answered in the affirmative.

No doubt this was not a wholly unrehearsed effect; the University Council had learnt that this Refuge had been intended for "poor or unfortunate women" (the latter were not eligible for St. Helens), and had taken into consideration its use for teaching of Obstetrics, and Dr. Batchelor was requested by the Faculty of Medicine to expound the Council's views.

Drs. Hocken and Church, with the Dean of the School and Dr. Batchelor, were appointed a committee to confer with the Charitable Aid Board (which had replaced the Hospital Trustees, and was to be in charge of the building) in order to establish the home forthwith and to secure the £500 which had been voted for it. A letter of thanks was written to Mr. Seddon, with an enquiry as to how much he would give—to which no reply was received. Ultimately £500 was placed on the Supplementary Estimates. The Premier had thus given leave, and had promised his help, to convert the Forth Street building, as it was generally called, into a Maternity home available to students, and one which would admit single women. This was reported in the *Otago Daily Times* of October 3, 1905.

Next month Dr. Batchelor addressed the University Council on the subject. He pointed out that instruction in Midwifery had always been a difficult matter, and that the number of outside cases had been reduced by the opening of the St. Helens Hospital. The New Zealand University regulations required that each student should attend six cases, but in the United Kingdom the study of Midwifery had been greatly stiffened up. There it had been found that maternal mortality had been much reduced in the lying-in hospitals, but that this had not been reflected in general practice, owing to the widespread lack of appreciation of aseptic technique. The need for more thorough education in the subject was recognized, but this was not available in New Zealand. The chance had come with the Forth Street building, which now belonged to the Charitable Aid Board. The Council should approach the Board to convert it to this purpose; funds would be available for the reconstruction, and the institution could be run for £500 a year, after repair. Dr. Batchelor was willing to teach nurses there. He concluded with the statement that "If the students

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were to be taught as in the last few years he would certainly refuse to hold the position of lecturer."

Drs. Batchelor and Hocken put the case before the Charitable Aid Board in the same month; Mr. Miller, the Chairman, was very sympathetic, but would not commit the incoming Board. The new Board, however, approved the proposal in February, 1906.

The home was completed in June, 1907, which, as the *Daily Times* remarked, was "greatly due to Dr. Batchelor's efforts," and it later became known as "The Batchelor Hospital." Dr. Batchelor thought the University Council should contribute to its expenses, and the Chancellor thought it should be brought into such association with the University that money could be voted for it.

In January, 1909, Dr. Batchelor resigned his appointments of Professor at the University and Gynæcologist to the Hospital. Before leaving the teaching staff, in February, 1909, Batchelor addressed the Faculty of Medicine on the teaching of Midwifery and Gynæcology, and indicated that a tutor in these subjects was required, as in those of Medicine and Surgery. He thought that the Charitable Aid Board should co-operate; the tutor should be Assistant Obstetric Physician to the Forth Street Hospital, and should receive a salary from the Board.

Immediately after this, applications for the post of Assistant *Surgeon* to the Maternity Home, Forth Street, were called for, and later in the year, in October, Dr. R. I. Ritchie was appointed Assistant *Physician* and Tutor, with a salary of £50 a year, being £25 from the Board, with Government subsidy. This was raised in the following year to £75.

And now arose one of the stupid conflicts which seem inevitable in institutions under dual control, even when the motives of both parties are quite excellent. The University naturally desired that their lecturer on Midwifery should be the medical officer at Forth Street, otherwise he could give no clinical instruction there. The Charitable Aid Board, who were responsible to the public, were not to be dictated to, and resolved to select the best man they could find, irrespective of his University connections.

Dr. Batchelor's intention to resign appears to have been due to a sudden impulse. He desired a seat on the University Council in order to further the interests of the Medical School, but as a teacher he was ineligible for membership. He intended to stand as a representative of the graduates, but for this also he was found to be ineligible, according to their constitution. Presumably his resignation of his clinical post at the Hospital took immediate effect, as he had only to refrain from offering himself for re-election, but, on the other hand, six months' notice of the termination of his teaching appointment was no doubt required by the University Council. Hereby arose a deadlock. He had resigned from the Hospital in January, and so was unable afterwards to give clinical instruction there. This he reported

in February. The instruction at Forth Street was meantime carried out by Dr. Ritchie.

The University Council conferred with the Charitable Aid Board in connection with the new appointment and made its position quite clear. The following is taken from the University Correspondence files:—

22nd March, 1909.

As desired by the Charitable Aid Board, the Deputation from the University Council submit in writing the Council's wishes. In order to secure that the teaching of Obstetrics is the best that can be obtained under the circumstances, it is essential that the University Lecturer in Obstetrics should be Honorary Obstetric Physician to the Maternity Home in Forth Street.

The Council of the University are aware that the appointment of the Honorary Physician is in the hands of the Charitable Aid Board. They ask the Board, however, before making any appointment to the Maternity Home, to allow the University Council to place before the Board the name of the medical man considered to be most desirable for teaching purposes, in the hope that the Board will appoint him as Honorary Obstetric Physician.

Under the rules and regulations of the Maternity Hospital it is provided under the heading: "The Honorary Obstetric Physician":

"Rule 1. He shall be lecturer in Obstetrics to the University of Otago, and shall reside at a convenient distance from the Hospital." This rule provides what the Council desire.

2. Tutor on Obstetrics. The University Council have been informed by their Medical Faculty that it is a matter of urgent necessity to appoint a Tutor on Obstetrics. The Council propose to make such appointment, but as the Tutor must of necessity teach at the Maternity Home, Forth Street, it is most essential that the Charitable Aid Board, in whose hands the appointment to the Maternity Hospital lies, should agree with the Council in the matter. The Council understand that a medical man is acting as Assistant to the Honorary Physician, and if the Charitable Aid Board confirm such appointment, the Council would also appoint him as their Tutor in Obstetrics. If the Charitable Aid Board, however, take any further action as regards such appointment, the Council hopes that they may be consulted in the matter before the appointment is made.

3. Payment to the Tutor in Obstetrics. The Council are already paying £25 a year to the Charitable Aid Board for the Maternity Hospital. We understand the Board receive 24/- a year subsidy, and the Council suggest that the Charitable Aid Board should pay something to the Tutor of Obstetrics as a very large amount of work is done in the teaching of nurses and the attending of patients by night and at other inconvenient hours.

The Council suggests that the £25 paid by them to the Charitable Aid Board should be devoted to the payment of the Tutor of Obstetrics and that it should be supplemented by a similar amount provided by the Board.

There were, of course, two separate matters under consideration, the appointment of an Obstetric Tutor, a matter of general progress, a coming into line with the teaching of medicine and surgery, and the unexpected resignation of the University Professor and the Hospital Gynæcologist.

The appointment of a *Lecturer* (not Professor) in Obstetrics and Gynæcology, to replace Dr. Batchelor at the School, was to be made

in September, and apparently his vacancy at the Hospital had not been filled. In August the *Otago Daily Times* gave some account of the cross-purposes of the Board and the Council. The Council of course wanted their Lecturer, not yet appointed; the Board, not to be dictated to, wanted the best "Obstetric Surgeon" available. The Council wanted "medical control" of the situation, and were ready to confer with the Board on the subject, but a deadlock arose.

The candidates for the Hospital appointment were Drs. Batchelor, Closs, Orbell, Riley and Ritchie; with the exception of Riley, none of these applied for the lectureship. Dr. Batchelor's name was withdrawn; he was abroad at the time of the election, and he had been proposed in his absence in hope of overcoming the deadlock. Dr. Ronald Orbell, the outside candidate, had been Assistant Master at the Rotunda Hospital in Dublin, but Dr. Closs was appointed; he had had charge of the Obstetric Ward at the Benevolent Institution. He had also done some pioneer work in the surgery of exophthalmic goitre.

Meantime, Dr. Frederick Ratcliffe Riley, with an Irish name and a Devonshire extraction, was appointed University Lecturer. He had been trained at the London Hospital, where he had gained a prize in Anatomy and a scholarship in Obstetrics. He had served as Assistant House Physician at the Soho Hospital for Women, and was F.R.C.S., England.

The arrangement, as might have been expected, did not work. Riley had no right of access to Forth Street since Closs was in sole charge. In October Ritchie was granted a fee of £5 to demonstrate the use of the midwifery forceps, but in December he wrote to say that his services were no longer required by the Charitable Aid Board, so that he was unable to attend the Hospital to teach. The matter came before the Faculty of Medicine, at which a naive remark of the Chairman of the Board was reported, that Dr. Ritchie's dismissal "would not interfere with his carrying on tutorial duties at the University." At this meeting Dr. Colquhoun moved that lecturers should be "active officers in the Hospital. Appointments necessary to the efficiency of the School should be safeguarded." About this time Dr. Scott was instructed by the University Council to ask the Board to permit the teacher of Surgery to have access to the Hospital; Barnett was then on leave of absence.

In February, 1910, the post of "Assistant Surgeon" to Forth Street was advertised by the Board, and Dr. Ritchie was appointed.

The deadlock among the seniors might have continued indefinitely, but Closs died in 1910, and Riley was appointed to succeed him. In practice, however, Forth Street was in the complete charge of Dr. Ritchie, who only called in Dr. Riley in consultation in difficult cases, and in 1911 his salary was raised.

Although the Forth Street difficulties were thus adjusted, those in the teaching of Midwifery were by no means at an end, and the following correspondence took place:—

Pitt Street,
Dunedin,
30th July, 1912.

The Chancellor,
Otago University.

Dear Sir,

I enclose a petition drawn up and signed by Medical Students of different years, calling attention to the difficulties experienced in attending the requisite number (12) of maternity cases, before becoming eligible to sit for the third professional examination.

Owing to the increasing difficulty in obtaining outside cases, students have to depend on the Maternity Home for the bulk of their experience. The admissions to the Maternity Home for the last four years have been respectively 115, 133, 158, 168.

Five nurses become qualified every year, and as by the regulations they each have to attend twenty cases unattended by students, it follows that the students must go short or else the regulations regarding the training of nurses must be broken. In two years the number of students requiring maternity experience in one year will be 28. Assuming that each student is able to attend four cases outside, a high average in my opinion, 224 cases (8 x 28) will be required at the Maternity Home to satisfy the University regulations as regards students alone, not to mention the number required by the nurses undergoing training. As the present number of admissions is about 170, it is obvious that unless some arrangements are made for gaining experience elsewhere, students will find it impossible to carry out the University regulations as regards the number of cases to be attended.

I am, Sir,

Yours respectfully,

(Signed) F. R. Riley,
Lecturer in Midwifery.

Dunedin Hospital,
2nd July, 1912.

The Otago University Council.
Gentlemen,

We, the undersigned Medical Students, beg to bring to your notice the following facts in regard to our Maternity work.

Under the existing regulations, each student is required to furnish a certificate of having attended twelve maternity cases, at least four being attended in a Maternity Hospital, before he is eligible to sit the Third Professional Examination.

Final year students experience considerable difficulty in obtaining more than two or three outside cases, so that in order to obtain the requisite number, they are forced to rely on the Maternity Hospital for the majority. The Forth Street Hospital is as yet the only one open to us, and as it is also a training home for nurses (who are each expected to obtain 20 cases unattended by students) it is obvious that a large proportion of the total annual number of cases is not available to final year men.

Although the present final year are comparatively few in numbers, they are experiencing some difficulty in obtaining cases, partly owing to the small number available, and partly to the fact that they could not begin before May, owing to the present system of biennial lectures in Midwifery.

The confinements in the Forth Street Hospital since May 1st of the current year till June 20th have amounted to 24, of which 20 have been attended by students, so that if this average is maintained, we see little prospect of students obtaining the requisite number of cases before the end of the Session.

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The difficulty will be aggravated when the present third year, numbering 28, begin their Maternity work. The present second and first years comprise even larger numbers.

Therefore we respectfully petition the Otago University Council to exert their influence with the Administration towards obtaining admission for final year students to the practice of St. Helens Maternity Hospital.

This letter was signed by 52 students.

Minister's Office,
Hospital and Charitable Aid Department,
Wellington, 11th September, 1912.

Sir,

I have the honour to acknowledge your letter of 2nd September, in which you bring to my notice the statement of the Lecturer in Medicine at the Dunedin Medical School, with regard to the difficulty of students at the School obtaining sufficient experience in Midwifery.

In reply I may say that when the St. Helens Hospital was established in Dunedin it was urged on the late Mr. Seddon that students should be allowed the privilege of attending Maternity cases in that Institution. Mr. Seddon, however, would not entertain the proposal, and as a compromise the Forth Street Hospital was established.

I regret, therefore, that I cannot see my way to accede to your request that students in their final year should attend maternity cases at the St. Helens Hospital, but possibly I may be able to help them with regard to their attending cases in connection with the Out-patient work at that Institution, or arrange for them to attend Out-patient cases in connection with Maternity Institutions in other large centres.

In fact I submit for your consideration the question as to whether it would not be of advantage to students in their fifth year, if they could be attached as surgical dressers or clinical clerks to some of the larger hospitals where the clinical material available is as great if not greater than that available to students in Dunedin Hospital.

I must admit that the question is a very large one and that it is beset with difficulties, but I am confident that many of these difficulties could be met, and arrangements made in the direction I have indicated with advantage to the students and all concerned.

I have, etc.,

The Registrar,
University of Otago,
Dunedin.

(Signed) R. Heaton Rhodes,
Minister for Hospitals and Charitable Aid.

In 1911 the Hospital staff made a request for a Gynæcological Ward, but this was delayed for some time.*

In December, 1913, Dr. Riley moved in the Faculty of Medicine that two students should be allowed to attend each midwifery case, and also asked the University Council to approach the Salvation Army for the admission of students to their Maternity Home, and if possible to make use of other hospitals. The Salvation Army was duly approached, and offered to admit women students only, which is believed to be their practice elsewhere, though it was modified in Dunedin to some extent. There were no women students at the moment, but in after years they obtained a good many cases from this source. A fee of £1 per week was charged.

* The King Edward Pavilion, containing the Batchelor (gynæcological) and Nightingale (female surgical) Wards, was opened in December, 1914. A third storey, containing Alexandra Ward (for soldiers), was added during the war.

And so the facilities for teaching practical midwifery remained for the rest of this period. The use of the Dunedin St. Helens Hospital and the erection of a Maternity Hospital in the neighbourhood of the main building and the Medical School belong to a later one.

Great developments took place in the matters of Public Health, Pathology and Bacteriology, which led in time to the erection of new buildings close to the Hospital, and ultimately to the removal of the medical classes from the site of the old university buildings, and to a semi-independent existence of the Medical School.

The Otago School, following the Scottish practice, had always attached great importance to the teaching of Public Health and Medical Jurisprudence, and Dr. Ogston was appointed Lecturer in these subjects when the complete course was first adopted, and was afterwards promoted Professor. At a very early date the suggestion had been made that the City Council might require a Health Officer, and that his duties might be combined with those of the lecturer.

Dr. Roberts, without any special training in the subject, had been successively lecturer on and professor of Pathology, and had included bacteriology in his curriculum. It was manifestly impossible for a man so placed to keep up to date in rapidly growing subjects, and some change was felt to be necessary. Roberts had done all he could; in 1905 Scott reported that a summer course in pathology had been held, which allowed more time for practical work, and Roberts reported improvements in his lecture-room and laboratory.

Dr. Batchelor, during a visit to England, had been greatly impressed with the work in applied bacteriology which was being done in Sir Almroth Wright's laboratory at St. Mary's Hospital in London, where the prophylactic and curative uses of bacterial vaccines were being widely studied, and on his return he gave notice of motion in the Faculty of Medicine in January, 1909, with regard to the teaching of Bacteriology, a proposal which received no encouragement from Scott. However, during this year one finds a letter from Scott asking what the Dunedin City Council proposed to do in the matters of Bacteriology and Public Health; and a little later the University Council received a report from the Faculty of Medicine on the teaching of these subjects. The Report stated that the bacteriology taught was sufficient for the medical students, but not enough for post-graduates, for whom a Government Bacteriologist was required. The teaching in Public Health was inadequate, since there was no laboratory work. The Faculty advised the institution of a Public Health Laboratory under a competent man, who should also teach bacteriology.

The scheme was referred back to the Faculty, and after discussion it was decided to rearrange the teaching and to separate Bacteriology from Pathology, and Public Health from Medical Jurisprudence, and to appoint a Lecturer on Bacteriology who should also

be Government Bacteriologist and Public Health Officer, and who should hold a degree or a diploma in Public Health. This separation of the subjects was first proposed by Dr. Malcolm.

This was agreed to by the Council; Professors Ogston and Roberts were given six months' notice of the termination of their agreements; Ogston was reappointed Professor of Medical Jurisprudence at £100 a year and Roberts of Pathology at £200 a year. At a later date, in 1913, it was proposed to make a whole-time chair of Pathology, of which the first incumbent was to be Dr. Roberts.

In April, 1910, Dr. Sydney Taylor Champtaloup was appointed Bacteriologist, Lecturer on Public Health, and Public Health Officer under the Government. He was quickly placed on the Professorial Board, and in the year after his arrival he was made Professor of Bacteriology and Public Health.

Champtaloup's was a very fortunate appointment for the School; he was a most vigorous and progressive person, and he introduced an element of enterprise into affairs, which one feels to have been lacking after Batchelor's retirement.

He was a New Zealander by birth, and had been educated at Edinburgh University, where he had been runner-up for the Ettles Scholarship of his year. At the time of his appointment he was M.B. and held the D.P.H., and later he became M.D., and D.Sc. in Public Health.

As long ago as 1905 an enquiry had been made of the University Council as to a D.P.H. course; nothing came of it at the time, but in October, 1910, a few months after his arrival, Champtaloup proposed one. It was delayed, but in the New Zealand University Amendment Act of 1912 it was provided that the Senate should confer the Diploma in Public Health either after examination or *ad eundem*. Instructions were given to make the necessary arrangements, and in 1913 Champtaloup arranged a course and submitted a syllabus. In this year Dr. Valentine mentioned that he had recommended that the chairs of Pathology, Public Health and Forensic Medicine should be entirely financed by the Government.

In the accommodation for Bacteriology some much needed improvements were soon introduced; about £150 was spent on the laboratory, of which the University and the Board each gave one-quarter and the Government one-half. Mr. Andrew Logan came out from Edinburgh as technical assistant. Champtaloup was appointed by the Charitable Aid Board to be Consulting Physician and Bacteriologist to the Fever Hospital. In 1910 Champtaloup proposed and organized a post-graduate course for practitioners which was held in 1911, and a second was held in 1912.

The accommodation for both Pathology and Bacteriology was quite inadequate; one has little doubt that Champtaloup said so very clearly, and in January, 1913, the Faculty of Medicine headed its list of urgent needs with a request for improved housing of these subjects. The Faculty evidently meant business, and in the following

May it asked specifically for a block of buildings in the neighbourhood of the Hospital, together with extensions (for Anatomy and Physiology) at the University.

In July the suggestion for the Pathology and Bacteriology building was put before the Minister of Education, the Hon. James Allen, and some time afterwards he announced that the University was authorised to purchase a quarter-acre section near the Hospital for a sum not to exceed £1,200. A quarter of an acre was found later to be insufficient.

From the first, Dr. Ferguson had pressed very strongly that the site should be near the Hospital, in which Dr. Valentine had concurred. The site selected was in King Street, immediately opposite the Medical Pavilion of the Hospital, and the Hospital Board, for some curious reason, was asked to take an option over this site. Plans were demanded. The appeal to the public was made in the following year. In March, 1914, £7,500 was asked for, which was to carry £ for £ subsidy from the Government. A single subscriber gave £2,000; the *Otago Daily Times* opened a subscription list with £200, and the members of the Faculty of Medicine promised £745, subsequently raised to £1,000. So matters stood at the time of Professor Scott's death.

The buildings, erected, adapted and projected, with their implications, are the major achievements of this period; the Medical Pavilion, the Maternity Home, the enlargements at the University, a projected Gynæcological ward, a new Out-patient Department, in which it was intended that Diseases of Children and of the Skin should be specially studied, and the project for the King Street site. Besides these there were a number of further developments which may here be summarized.

The number of students, which had previously shown a serious falling-off, continued gradually to rise; the following were the total numbers under instruction in successive years from 1905 onwards:—88, 80, 84, 80, 84, 96, 109, 121; and it was noted that nearly all the larger hospitals were "officered" by Otago graduates; that is, the hospitals employed them as resident medical officers.

In 1886 there had been 24 doctors practising in Dunedin; in 1910 there were 40, of whom 26 were New Zealanders and 9 Otago graduates.

A matter which produced considerable controversy in later years was the establishment of the "Staff Fund." Part of the students' hospital fees were originally paid to the old Hospital Trustees, and part to the teachers; in 1904 both parties agreed to forego their shares, which were pooled to form a fund for the provision of clinical instruments for hospital and teaching purposes; the Fund, however, came to pay for a number of things which could not well be included in that specification.

During these years the matters of retiring allowances and superannuation for University Professors was discussed; a Teachers'

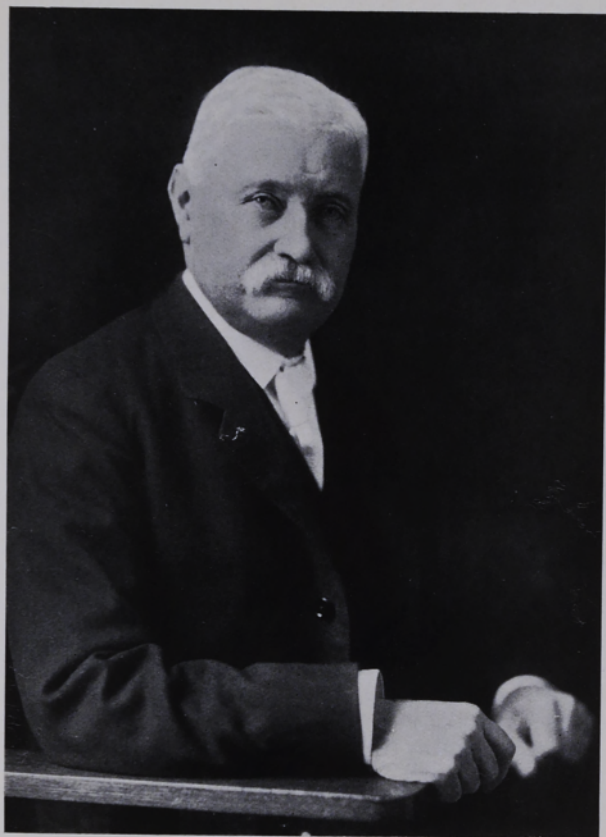
Superannuation Amendment Act was passed in 1908, of which the Professorial Board approved. Professors and lecturers had the option of joining the scheme or not, as they preferred, and were not compelled to resign their appointments on attaining any particular age. The subject came up again in 1912, when a new Act was passed which made it compulsory for professors to join the scheme, though the maximum pension they could receive was £300 a year. The scheme was considered far from actuarially sound, and was the cause of considerable heartburning in later times, when the salaries of professors had greatly risen, and their contributions to the Fund had become altogether out of proportion to the pensions they were to receive on retirement.

There had long been great dissatisfaction with the fact that the University was not represented on the Board of the old Hospital Trustees; the University never did obtain such representation, but the two bodies came to co-operate better. In 1912 the Hospital and Charitable Aid Board, successor to the Trustees, was "recommended to invite applications by advertisement for appointment to the Hospital Staff," which became its practice. In this year also a member of the University Council was elected by the Hospital Board and another by the City Council. Since 1910 the University Council had nominated a co-operative member of the Hospital Committee, for which post it had selected the Dean of the Medical School.

The Ministerial suggestion made in 1912 by the Hon. R. Heaton Rhodes, in connection with the dispute about St. Helens, that students should be admitted to hospitals of 100 beds, other than Dunedin Hospital, for general hospital practice, was followed up, and in 1913 students were allowed to attend them in vacations, or after they had completed their fifth year, which meant in practice that a man who had failed in an examination could get access to clinical cases and experience instead of cooling his heels in Dunedin, where the staff was already sufficiently occupied in giving adequate instruction to students taking their regular course.

In 1908, on Dr. Barnett's suggestion, a "special" examination for those who had failed at the regular one was established. Candidates must have done six months' work at a hospital of 100 beds. A stimulus to this decision was given by a complaint that a student had been offered the post of Assistant Surgeon (no doubt really house surgeon) at one of the minor hospitals, but had been told that he must finish his course in Dunedin. With the small annual output of qualified men at that time there was great difficulty in the supply of hospital residents.

All through these years the Students' Association, that active body, had kept a close watch on the financial interests of its members, and several times managed to obtain the reduction of fees, which are apt to mount with the continued introduction of new tutorships and departments.



H. L. Ferguson

A Travelling Scholarship* was instituted; the first election was that of T. W. J. Johnson, in 1909, who, after his return from abroad, first practised at Napier, then went to England to study the preparation and use of insulin when it was first introduced in the treatment of diabetes, and afterwards practised as a physician in Auckland. He was followed in 1910 by M. H. Watt, afterwards Director-General of Health for the Dominion. Others were: In 1911, W. P. Johnston; in 1912, Thaddeus Julian; in 1913, W. Sowerby; and in 1914, R. A. H. Fulton, son of the historian of *Early Medical Practice in Otago*.

In 1909 the Middlesex Hospital, London, largely, it is believed, through the influence of Dr. Barnett, who had held appointments there, instituted a scholarship* open to New Zealand students, whether qualified or not, but who had passed the examinations in Anatomy and Physiology, and were proceeding to take the final subjects in England. The scholar was given a year's clinical work free of charge, during which he might act as clinical clerk and surgical dresser, and after which he was eligible for house appointments.

During 1913 it was decided to grant medals for work done in the classes in the Medical School, but the decision was not carried out.

In 1913 there was an outbreak of smallpox in the North Island, and a number of students went to the infected area to carry out vaccination. The value of their services was recognized by the authorities, and they were asked to continue them; this might have involved a special examination, as the students were on duty at the ordinary examination time.

"Woe unto you when all men shall speak well of you." The University of New Zealand in general, and the Otago Medical School in particular, were spared that malison. There was, in fact, considerable internal dissatisfaction with the University of New Zealand. In 1911 a professorial conference had been held, and had made certain recommendations, which had been flouted by the Senate. Accordingly a petition was put forward for an investigation into the matter by the Education Committee of the House of Representatives, which was followed by a demand for a Royal Commission. In 1913 the Education Committee sat in Wellington to take evidence. This evidence included a most violent attack on the Medical School, with accusations of incompetence and worse by a Dunedin surgeon who had served for a short time on the Hospital staff. Most of his charges related to conditions alleged to have existed some ten years before, and broke down under cross-examination. Unfortunately the Wellington newspapers printed only the accusations and not their rebuttal, which gave rise to charges of interprovincial jealousy and left a very undignified impression.

Dr. Cameron, the Chancellor, gave evidence on behalf of the School, and Dr. Colquhoun, who had been deputed for the purpose, drew attention to the following facts:—The School had increased in numbers and there were great advantages in being able to complete the medical course in New Zealand. The Hospital had been improved. The

* Appendix III.

graduates filled appointments throughout the country. Several graduates had served in the South African War, and one in Mawson's South Polar Expedition. An increasing number of doctors' sons were entering the School. Twelve out of forty-two Dunedin doctors were Otago-trained, and eight were on the Hospital staff, besides a woman graduate, who was in charge of St. Helens Hospital. He drew attention to the number who went to England for post-graduate study; in 1910 he had recorded that 84 out of 130 had done so, and had obtained the following higher diplomas:—F.R.C.S., England, 12; F.R.C.S.I., 1; F.R.C.S., Edin., 1; M.R.C.P., Lond., 1; a proportion of one in five and a-half. The staff, he observed, was poorly paid, and its members would have done better for themselves if they had not undertaken teaching; they paid their fees into the Staff Fund, and the public were sufficiently impressed with their efficiency to subscribe handsomely for new buildings for the hospital. He added that professors should be sufficiently well paid to be able to limit their outside work to consultations without having to undertake general practice. Sir Robert Stout also wrote in support of his old University College.

As has been said, during these years Dr. Scott's health began to fail, and Dr. Malcolm frequently acted for him. In May, 1913, he returned from leave, but Dr. Colquhoun, his medical adviser, forbade his attendance at the University Council; however, he returned to duty before the end of the year. He was not really fit to do this, and at last he found that his speech would not allow him to lecture, a most distressing situation for both teacher and class. Dr. Colquhoun mentioned the occurrence in his obituary notice of Scott in the *New Zealand Medical Journal* with the following comment: "Then his students did what I think was a most kindly and generous act. They came to him in a deputation and said they hoped he would not mind what had occurred; they knew quite well that the words he had missed were not essential to the demonstration, and they hoped he would continue his teaching."

Dr. Scott died on 25th February, 1914, and the tributes paid to him in the University Council, the Professorial Board, the Faculty of Medicine, and elsewhere all display the most profound regard and admiration for his teaching skill, his business ability, his devotion to duty, and his personal integrity.

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CHAPTER XIII

1914 — 1920

DR. FERGUSON, DEAN THE WAR OF 1914 INCREASE IN THE NUMBER OF STUDENTS NEW BUILDINGS

BEFORE the death of Dr. Scott both Professor Shand and Professor Black died towards the end of 1913, and Professor Malcolm succeeded Shand as a representative of the Professorial Board (of which he was chairman) on the University Council.

Dr. Scott bequeathed to the University his anatomical and physiological diagrams, his collection of the bones of sea elephants, and other anatomical preparations, his volumes of the *Journal of Physiology* and of *Brain*, and his pictures of celebrities.

The first concern of the Faculty of Medicine at this time was, of course, the election of a Dean in the place of Scott, and the matter became controversial. Dr. Colquhoun was the senior member of the Faculty, and it was no doubt felt by many that his election would be appropriate; he was, however, in rather failing health and old for his years. A contested election was undesirable, and Dr. Ferguson was asked to accept the appointment. He agreed, largely to save an unpleasant situation and expecting to act as a stop-gap, but he remained head of the Medical School for more than twenty years, and during this time he was, beyond all question, the chief driving force in the expansion and development of the School which were to come. He would be the last to deny that he was well supported by his colleagues, but such support as he got is only given to men of outstanding qualities.

Henry Lindo Ferguson came of mixed descent, chiefly North Irish, from Scots of the Pale, with some Swiss and some Jewish connections. His father was a founder of the Chemical Society, whose researches on the properties of silver nitrate form the basis of modern photography. The son was born in London in 1858, and was educated in Ireland. He entered the Royal College of Science in Dublin at the early age of fifteen, where most of his contemporaries were much older, and at the end of his first year was awarded one of two Royal Scholarships. Later he decided to enter Medicine, and took his course at Trinity College, where it was necessary to take a preliminary degree in Arts; in this course Ferguson was awarded the gold medal.

As a student at the Adelaide Hospital he became associated with

Rainsford, the Ophthalmic Surgeon, and decided to adopt his specialty. He qualified in 1880, became F.R.C.S.I., and later took the M.D. degree of Dublin. He held resident appointments in St. Mark's Ophthalmic Hospital, and then visited the Continent. Afterwards he returned to Dublin as Assistant to Charles Fitzgerald, then Oculist to the Queen in Ireland, and he became Assistant Surgeon to the National Eye and Ear Dispensary and Assistant Ophthalmic Surgeon to the Richmond Hospital.

His health was not satisfactory, and in 1883 he determined to settle in New Zealand, where he chose Dunedin, on account of the embryo Medical School there. He was the first trained Ophthalmic Surgeon to practise in either Australia or New Zealand, and he very early became the recognized authority in his subject, and was frequently consulted by patients who came all the way from Australia to see him, a long journey for such a purpose in those days. His local practice became very large. Though a highly skilled surgeon, with an intellectual grasp of his subject and a very large experience, he contributed very little to the literature.

In 1884 he opened an Ophthalmic Department at Dunedin Hospital, where he taught students. He was appointed lecturer in 1886 and professor in 1909. He was very intimate with Dr. F. C. Batchelor, and became associated with him in his schemes of reform. The Campbell Pavilion, the first block of modern wards in Dunedin, and, indeed, in New Zealand, was built largely to his specification.

In 1896 he was President of the New Zealand Medical Association, at the time when the Intercolonial Medical Congress was held in Dunedin, under the presidency of Dr. Batchelor. Ferguson then started the movement to form a New Zealand Branch of the British Medical Association, which was accomplished the year after.

In addition, Ferguson was a force in the social life of the City of Dunedin. He was a connoisseur of the arts, particularly of painting, and he had much to do with the local Art Gallery. He was many times President of the Dunedin Club, and was a very distinguished host, and was often called upon to entertain Vice-Royalty and persons of importance in general. His activities as Dean will become apparent.

On March 16, 1914, Dr. Malcolm, Chairman of the Professorial Board, advised the University Council that Dr. Ferguson had been elected Dean of the Faculty of Medicine, and Dr. Champtaloup Sub-dean. Ferguson had made it a condition that he should have the assistance of a sub-dean.

At the same time it was, of course, necessary to appoint a Professor of Anatomy, and the Hon. James Allen undertook to communicate with the High Commissioner, who agreed to give assistance. The salary offered was £800 a year, without fees, and the selectors for the appointment were Professor J. Symington, of Belfast, and Professor Arthur Robinson, of Edinburgh. Nine candidates entered for the Chair, and the successful one was William Percy Gowland, M.D. (Lond.), F.R.C.S. (Eng.). Dr. Gowland was then thirty-five years

old; he was educated at Manchester and he obtained the gold medal in Anatomy in his M.B. examination, and honours in Obstetrics and Gynæcology. After qualification he served as Assistant Demonstrator of Anatomy and Physiology in the Victoria University of Manchester, and held clinical appointments at the Manchester Royal Infirmary, at Lincoln, at Isleworth Infirmary, and at the Chelsea Hospital for Women. He was for a time in practice at Oldham, in Lancashire, but gave it up to become Senior Demonstrator and Assistant Lecturer on Anatomy at Liverpool University, where, in the absence of the professor, he had charge of the department, and equipped a section for work in Embryology. He arrived in Dunedin in December, 1914.

Dr. Gowland, a very typical "Lancashire Lad," whose speech never failed to bewray him, devoted himself with great thoroughness to the teaching of elementary anatomy to students, and an opinion often heard from former pupils of the School was that his were the most instructive lectures they had attended in the whole course. Though he did little writing or personal investigation, he inspired a good deal, and some excellent research has been published from his department at Otago. Three theses on anatomical subjects were accepted for the M.D. without further examination, a rather rare distinction in this University.

During this year, 1914, other professorial chairs came under discussion. Whether as a result of the appointment of the new Dean or not, Dr. Colquhoun addressed the following letter to the Chancellor:—

30th May, 1914.

Dear Mr. Cameron,

May I ask you at the next meeting of the University Council to place my resignation of the Chair of Medicine before the members? In resigning after thirty years' service I would like to express my appreciation of the courtesy and consideration which I have always received from your Council and its predecessors. I would like also to express my gratification, which I am sure is shared by all the teachers of the School, in the position taken by our graduates in Medicine, from the earliest to the latest, in and out of the Dominion. Their success has amply justified the wisdom of the founders of the Medical School. The recent decision of the Council, made possible by the generosity of our citizens, to establish a well-equipped school for the teaching of Medicine, Surgery, Gynæcology, and Therapeutics, with their accessory departments of Pathology and Bacteriology, in the vicinity of the Hospital will, I am convinced, greatly increase the efficiency of the School and make its future secure. I hope also that the Council may see its way to secure the help and the co-operation of other parts of the Dominion in order to make the School, even to a larger extent than it is at present, a national and not a local institution. My resignation will not, of course, take effect until the end of the year.

Yours very truly,

(Signed) D. Colquhoun.

The University Council adopted the following minute in August, 1914:—

In accepting the resignation of Dr. Colquhoun, Professor of Medicine, the Council desires to place on record its appreciation of the great and manifold services rendered by him to the cause of medical education in

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New Zealand. In every movement having for its object the improvement of the Medical School, Dr. Colquhoun has been a leader. For a period of nearly thirty years, in the class-room and in the wards of the Dunedin Hospital, he has zealously guided the training of his students, scores of whom are now practising their profession in this Dominion. His influence for good, both in the University and in the community generally, has been very marked. The Council hopes that in his retirement he may have every happiness.

Dr. Colquhoun generously consented to continue in his appointment till March, 1916, the war having broken out, and he actually remained in office till 1919, and even in 1920 he delivered lectures in the early part of the year before the arrival of his successor.

Colquhoun had come out originally as a lecturer on Medicine, and was appointed Professor only in 1909, when Barnett, Ferguson, and others were given the same title. At this time, five years later, it was felt that definite specifications for the Chair should be drawn up, and the Faculty of Medicine addressed a memorandum to the University Council which contained the following recommendations:—

1. That the Professors of Medicine, of Surgery, and of Midwifery and Gynæcology should receive salaries sufficient to render them independent of general practice.
2. If the salary of the Professor of Medicine was to be £500 a year (which the Faculty considered too small for the purpose) the Professor should be forbidden the practice of Midwifery and Surgery and club practice.
3. He should devote two hours a day to the work of his Chair or to work in the Hospital, in addition to his lectures.
4. He should hold the M.D. of a British university or the Membership of one of the Royal Colleges of Physicians.
5. The appointment should be advertised throughout Australasia.

In view of the war, the matter lapsed for the time being.

In April Dr. Champtaloup was appointed full-time Professor of Bacteriology and Public Health, at a salary of £700 a year, without fees; and a little later he applied for leave of absence during 1915 in order that he might visit medical schools to get ideas for the proposed new buildings and to arrange for the importation of the materials necessary for his work. He noted in this application that the *Professor of Clinical Pathology* (the first suggestion of this appointment) might have the use of his laboratory during his absence.

Dr. Roberts had had some increase in his salary as Professor of Pathology, and in August the Chancellor and Dr. Malcolm submitted proposals for the appointment of a Professor of Clinical Pathology, which were approved by the University Council. His duties were to include the conduct of post-mortem examinations and he was to be Clinical Pathologist to the Hospital. This officer was expected ultimately to succeed Dr. Roberts.

It was decided to make the appointment. The High Commissioner's good offices were again requested, and the post was widely advertised, in *The Times*, *The Scotsman*, *Nature*, *The Lancet*, *The British Medical Journal*, *The Morning Post*, *The Aberdeen Free Press*, and *The Irish Times*. In addition, particulars were sent to the principal hospitals, to the University Appointments Committees, and to university professors. The war had by this time broken out.

The selectors were Professor J. M. Beattie, of Liverpool, and Professor Lorain Smith, of Edinburgh. The successful candidate was expected to take over duty in June, 1915, but owing to the war his arrival was delayed till the end of 1916.

There were nine candidates, of whom four were placed on the short list. Dr. Alexander Murray Drennan, M.D., F.R.C.P.E., was strongly recommended on his academic record, and in addition the selectors made the following note:—

"As to personal qualifications, they would all make agreeable and good colleagues, but even on this side we would place Dr. Drennan first, and we both speak from an intimate association with him. We would emphasise the fact that harmonious working between the Professors of Pathology and Bacteriology would be essential for the success of the two departments, and we are quite sure that none of the candidates would be as likely to bring about this harmonious working as Dr. Drennan." This opinion was very thoroughly endorsed by Dr. Drennan's colleagues at Otago.

Dr. A. M. Drennan, at the time of his application for the Chair of Pathology, was First Assistant to the Professor and Lecturer on Practical Pathology at the University of Edinburgh, Pathologist to Chalmers Hospital and Assistant Pathologist to the Royal Infirmary, Edinburgh. He had held the Ettles, Vans Dunlop and Crichton Research Scholarships and had been Resident Physician at the Royal Infirmary.

In May, 1915, Dr. Drennan asked permission to enter the R.A.M.C. for the duration of the war, which was granted, and he served in Egypt and at Lemnos. A year later the University applied for him, as his services were urgently required in Dunedin. The Council was informed that his military appointment would terminate in October, 1916, and that he could then be released.

Meantime, other appointments at the School were proposed and filled. Lectureships on Diseases of Children and of Diseases of the Ear, Nose, and Throat were advertised, each lecturer to deliver not less than twenty lectures. Dr. Ernest Williams was appointed for Children's Diseases. He was a graduate of the University and had been eight years on the Hospital Staff and six years in charge of the Karitane Hospital for Babies; in 1913 he had visited London, and studied at the Hospital for Sick Children, Great Ormond Street, and elsewhere. Dr. Arthur Hall, M.B., was appointed to lecture on the Ear, Nose, and Throat. He was Assistant Surgeon to the Hospital for those specialties, and also for Diseases of the Eye. A syllabus was drawn up for each of these sets of lectures.

The matter of new buildings for the Medical School was not likely to be allowed to rest by the new Dean, who was always keenly interested in bricks and mortar, and had great imagination and sound judgment in everything to be built with them.

In February, 1914, Mr. Allen telegraphed to the University Council that the Government was prepared to go on with the Anatomy and Physiology buildings on the old site, the promised £10,000 to be spread over two years.

There was also the much more important new building for Pathology and Bacteriology to be built opposite the Hospital in King Street, for which plans had been requested in 1913. It will be recalled that an appeal was made to the public for £7,500 for this purpose, which was to carry subsidy, and that the *Otago Daily Times* had opened the subscription list with £200. The staff altogether subscribed £1,000, the Dunedin Savings Bank contributed £750, while an anonymous donor, who was afterwards revealed as Mr. William Dawson, had given the large sum of £2,000. In May, Mr. (afterwards Sir) James Hutchison* announced that £7,700 had been subscribed to the *Times'* fund, and expressed himself as much gratified at the University's recognition of the services his journal had rendered to it. Competitive designs for the new building were invited.

The King Street site was the property of the Hospital Board, over which it had taken an option, and a deputation waited upon the Board to request it to hand over the site to the University. A joint committee of the Board and the University was appointed to interview Sir Heaton Rhodes, Minister for Hospitals and Charitable Aid. This was in March; in December we find Dr. Ferguson pressing for the purchase of the site by the Government, for which an additional quarter-acre of land was found to be necessary. The request received a sympathetic reply from the Minister, but nothing more. In the previous August the Secretary for Education had already suggested the suspension of all authorized works for the duration of the war, which had then just broken out.

Dr. Champtaloup drew up a specification for the new buildings, at an estimated cost of £13,000. The building was to consist of three storeys above ground, with a flat roof and a basement for storage. The floor space was to be 26,000 square feet, of which 20,000 were for rooms. On the roof were to be animal houses. On the top floor were to be 6,000 square feet, including 1,800 square feet for a large laboratory, and there were to be also some minor laboratories, the professor's laboratory and private room, kitchen, preparation and store rooms, chiefly for bacteriology. On the first floor were to be the department of Pathology and the library, the professor's room and laboratory, and the Materia Medica Museum. On the ground floor were to be lecture rooms, students' rooms, the offices, and the museum; in the basement, store room and dark rooms.

Messrs. Mason and Wales, the architects, produced a sketch plan and elevation, and estimated the cost at £14,200. As will appear later,

* Editor of the "*Otago Daily Times*."

this estimate was greatly exceeded; the foundations turned out to be very difficult to establish owing to springs present in the soil, and all costs were, as usual, much enhanced by the war. The suggestion to suspend all works was fortunately not adopted.

The usual negotiations with the Government for money went on all the time. The specialization grant of £1,500 a year to the University was to be annual, but subject to the Parliamentary vote. Late in the year the Hon. James Allen wrote to the Council on the New Zealand University Amendment Bill, and observed that in 1912 a specialization grant of £2,000 had been made to the University, which was increased in 1913 by £1,500, that noted above, for the Medical School. These were part of a total grant of £5,000 to the University of Otago.

A few matters of interest recorded during the year were the following:—The Hospital Staff consisted of—Physicians, Drs. Colquhoun, Fitchett, and Marshall Macdonald; Assistant Physicians, Dr. S. A. Moore, E. H. Williams, and R. I. Ritchie; Surgeons, Drs. L. E. Barnett, F. S. Batchelor, and E. J. O'Neill; Assistant Surgeons, Drs. S. Allen, W. Newlands, and T. Fergus; Gynæcologists, Drs. F. R. Riley and C. North; Ophthalmic Surgeons, Drs. H. L. Ferguson, Winifred Bathgate, and A. J. Hall; Pathologist, Dr. W. S. Roberts; Bacteriologist, Dr. S. T. Champtaloup; Dental Surgeon, Dr. H. P. Pickerill. Dr. Church sat on the Hospital Committee in place of Dr. Scott. The Hospital Board made an annual grant of £400 to the Bacteriological Laboratory, the University to settle all accounts.

Dr. M. H. Watt, a former travelling scholar, was appointed Demonstrator of Physiology. He ultimately became Director-General of Health for the Dominion.

A new system of "Terms" was introduced in the Medical School, which did not synchronize with those in the other faculties; four terms had to be held in 1915 in order to complete the readjustment. By the new arrangement there were to be three terms; the first was to be as in the other faculties, the second and third were to be each of twelve weeks, with two weeks between them; the last was to end about 22nd December.

The question of professors acting as examiners had arisen in the University. The Faculty of Medicine had agreed to the proposal, but held that the professors should not be called upon to do so without pay.

There was a general feeling that times had changed—this had existed before the war—and that a good deal of reform and reorganization were required in the curriculum, in the composition and procedure of the Faculty of Medicine and its relations with the University Council and the Hospital Board, and that more method was needed in fixing the dates of examinations and in administration generally.

No Dean could have been chosen who would have been more alive to the situation or more ready to deal with it than Dr. Ferguson. Less than six months after appointment he went over to Australia to confer with the authorities of the schools in Sydney, Melbourne, and Adelaide, and to study their methods. While he was in Australia the war broke out.

The war naturally increased the difficulties of administration enormously. It meant a depleted staff, a curriculum disorganized by attempts to shorten it, by modifications to be made to help returned soldier students, and by a greatly increased annual entry. In addition, it soon became necessary to find two young medical officers regularly every month for transport duty, and there was a corresponding difficulty in finding house surgeons for Dunedin and other hospitals.

The depletion of staff was another serious matter. Ferguson returned from Australia to find that Eugene O'Neill, a surgeon on the Hospital Staff, and so one of the clinical teachers, had joined the Forces. O'Neill was a South African veteran, with a good record in that campaign. He sailed with the Main Body from New Zealand in the 1914 War, and served on Gallipoli, where he was awarded the D.S.O., and later in France, where he commanded the New Zealand Stationary Hospital, and afterwards the New Zealand Hospital at Walton-on-Thames, in England, for which he received the C.M.G.

Early in 1915 Dr. L. E. Barnett, the Professor of Surgery, applied for leave of absence to serve in the war, the offer of his services having been accepted by Sir A. Pearce Gould, Surgeon to the Middlesex Hospital, where Barnett had had some of his training. Leave was granted, and Drs. Stanley Batchelor, W. Newlands, and Sydney Allen were appointed to give the lectures in Surgery. Batchelor was to act as examiner.

A number of medical students volunteered for service, and several were in O'Neill's Field Ambulance. R. A. Church, son of the Dunedin doctor, was awarded the M.M. "for gallantry in carrying out his work on Gallipoli." But the School was small; there would be few doctors forthcoming in the future if students were allowed thus to abandon their studies, and the importation of medical men from Home had come to an end. It was wisely decided to recall these students, and towards the end of the year Dr. Champtaloup found himself in considerable difficulty in making special arrangements for eight men returned from active service, and in devising courses which would permit of them becoming qualified in the minimum of time.

Barnett had offered his services on the understanding that they would be utilized at a New Zealand Base Hospital, but this was not then established. He therefore joined the R.A.M.C., and served at Colchester and at Malta. In January, 1916, on the death of Major Savage, an Auckland surgeon serving as a specialist, Barnett applied for transfer to the N.Z.M.C. This was approved by the University Council. He was promoted major, and served in the New Zealand General Hospital at Pont de Koubbeh, Cairo, where there were 1,000 patients, including all the New Zealanders who were sick or wounded.

In June, Colonel Parkes, the New Zealand Director of Medical Services, applied for Barnett for a further period, and he was expected to return to New Zealand in March, 1917. In 1918 Major Barnett was awarded the C.M.G.

Dr. Marshall Macdonald also volunteered, and served in France with the French Red Cross, with a team of distinguished French neurologists.

During 1915, and later, the University Council offered their congratulations to the next of kin of a number of their *alumni* who had been mentioned in despatches by the commander-in-chief, some of whom were awarded decorations. The first were Captain O'Neill, D.S.O., as recorded above, and Randall Woodhouse, M.B., mentioned in despatches.

Sergeant T. H. Denniston was killed in action.

The Hon. Mr. Justice Frederick Chapman presented Dr. Hocken's microscope to the Medical School. It had been intended for his son, Captain G. M. Chapman, R.A.M.C., M.B. (Cantab.), who had been killed in action at the second Battle of Ypres, while serving with the 2nd Dragoon Guards (Queen's Bays).

During 1915 the additions to the Anatomy and Physiology Departments were completed. It was noted that more money was required for their equipment.

In the same year Dr. Batchelor (senior) died, and the Forth Street Maternity Hospital, which he had practically founded, was named and afterwards always known as the Batchelor Hospital.

Dr. Gowland soon began to move in the matter of improving his department. He asked leave to make Dr. Scott's books the foundation of a "Scott Library," to be kept in the Anatomical Department, and to which the anatomical works in the general library were to be added. He also put in requisitions for teaching facilities, including an epidiascope, for laboratory assistance, and for structural alterations. He pressed strongly for the appointment of Dr. M. H. Watt, whom he thought likely to go elsewhere unless speedily secured, and he obtained the services of Mr. A. E. Kidd from the Department of Zoology in Liverpool as technical assistant.

Dr. Gowland, with no clinical obligations attaching to his appointment, volunteered to do surgical work at the Hospital, and asked the Council's permission, and in August he was appointed, but he did not become a regular member of the honorary staff.

Dr. Emily Siedeberg presented an enlarged photograph of Dr. Scott "in recognition of his help, which enabled her to overcome her difficulties in entrance" (to the study of medicine).*

At the end of 1914 Dr. Champtaloup submitted a report on his laboratory, which was, of course, still in the Hospital. In addition to the routine work of the department he had made investigations on the type of tubercle bacilli which occurred in children, on sensitized vaccines, and on yeasts in urine. He noted that his right to charge fees to practitioners had been challenged. These, however, only amounted to about £50 a year. During 1915 he was definitely granted the right to private practice in his spare time.

Dr. Champtaloup issued an illustrated booklet on the Medical School, a copy of which was sent to every doctor in the Dominion, and

* This photograph is reproduced opposite p. 160.

a copy was given to every student who passed the medical preliminary examination.

Dr. John Tait Bowie acted as Dr. Champtaloup's assistant. He had been employed as a medical missionary in the New Hebrides. His hospital there had been destroyed by an earthquake or some other convulsion of Nature, and he arrived in Dunedin rather destitute, but the authorities there were very pleased to find a medical man with hospital experience who was willing to undertake duty. Early in 1915 he was made Assistant Medical Superintendent at the Hospital, and in 1916, on the resignation of Dr. Marshall Macdonald, who had held the post for nine years, he was appointed Medical Tutor, with a seat on the Faculty of Medicine. Dr. Bowie has been described as a "very good man in a tight place." During the influenza epidemic of 1918-19 he took the principal charge at the Hospital, organized the subsidiary hospitals, and issued the bulletins. Later on he went into practice in the city, and was appointed Lecturer in Clinical Medicine, as is described below, but he only held this post for a short time. After some years of highly successful general practice he abandoned medicine to take up farming.

Dr. Percy Cameron was appointed to give a course of ten lectures in Radiology to students. at a fee of £1 ls. per head. The course was to be given in the October term, and to be compulsory for candidates for degrees in Medicine.

About this time a "Board of Studies" was instituted by the University of New Zealand. This met annually and was composed of five members from the Professorial Board of each constituent college. At Otago the Faculty of Arts wished to nominate all five members, and it was decided that this Faculty should have at least three, and some discussion took place as to the representation of the special schools. On the other hand, the Medical and Dental Faculties wished to have direct access to the Senate, not through the Board of Studies. Dr. Champtaloup, who had been appointed, resigned on the understanding that if it was found desirable to have a representative of the Faculty of Medicine his substitute should resign. All business relating to degrees had to go through this board. During this year Dr. Malcolm was appointed a member of the Senate.

It has been noted in a previous chapter that the Hospital Board and the Honorary Staff of the Hospital agreed to forego their fees in order to establish a Staff Fund for the purchase of apparatus to be used in teaching. This fund has been at different times an abundant source of controversy. Presumably an attempt was made to obtain a Government subsidy on the subscriptions, and the matter came before the Auditor-General. This officer at once questioned the legal right of the honorary secretary of the Staff to receive the fees, which were not for lectures but were due to the Board for the use of the Hospital. The Staff secretary could not receive them, and the Board could not claim subsidy. Dr. Ferguson was granted an interview with the Auditor-General, and claimed that the fees were for special teaching, apart from

the duties of the medical staff, as such. It appears to have been decided that the fees might be given to the Board as a donation, but there must be no condition as to their application, or no subsidy could be granted. It is doubtful if any claim for subsidy was actually made at any time after this. Certainly it was not the practice to claim subsidy in later years.

Meanwhile, there was the matter of the new Pathology and Bacteriology block. The site was considered too small, and an additional quarter-acre of land was required. This area was in Hanover Street, which runs west at right angles to King Street, in the block under consideration. An appeal was made to the Government for more money for its purchase, which was declined.

Dr. Ferguson wrote to advise the University Council of the further expenditure which would be required owing to the increase in the number of students, for the administration of the new block, and for the establishment of the Chair of Clinical Pathology. He estimated this expenditure as follows:—

1. A Laboratory Assistant, at a salary of from £200 to £250 per annum.
2. A caretaker, to act also as post-mortem assistant and to take charge of animals, at £150 per annum.
3. A typiste and librarian, at £100 per annum.
4. Increased assistance (unspecified) in the Anatomy and Physiology Departments.
5. £500 for the library.

The architects' plan of the new block was drawn mainly to Ferguson's specification. It is quadrangular, the quadrangle being occupied by a large lecture room, the floor of which is sunk below the level of the ground floor. The plan was approved by the Faculty of Medicine, by the Health Department, and also by the Education Department, the latter having the decision as to subsidy. Any further grant for the site was refused, as indicated above. The Education Department also declined an added request for £2,000 for more buildings, but indicated that it would consider these later. It was afterwards stated that if the Government gave the £2,000 which had been requested for equipment it would pay no subsidy in that year.

Mr. T. K. Sidey, one of the Dunedin Members of Parliament, busied himself in trying to secure the £2,000 for the equipment of the new buildings of the Medical School, but he found the Government to be very short of money.

The Hospital Board indicated that it would accept £1,050 for the property in King Street, with the right to remove the existing building, which was the amount which the Board had paid for it. The Hon. J. A. Hanan, Minister of Education, was invited to lay the foundation stone of the building, and on the 1st of June, 1916, foundation stones were laid by him and by Mr. William Dawson.

UNIVERSITY OF OTAGO MEDICAL SCHOOL

In April, 1916, Dr. Ferguson addressed one of his many letters to the Chancellor on the needs of the School. He pointed out the changes in conditions which had occurred since his last report. Until the war the growth of the School had been gradual; the numbers of New Zealanders entering Medicine had shown little variation; there were about thirty in every year, but a constantly increasing proportion had taken the course at Otago, and fewer had gone Home. Thirty admissions to the register per year, with an average of twenty years in practice, gave 600 doctors in the country, or one to every 2,000 of the population. The Home supply was now cut off, but an entry of fifty students a year was ample to secure the full number required. But when the war broke out the entry rose to sixty a year. This would mean more doctors than (it was thought) could be absorbed, and the number of entries was expected to fall. The number would, however, be at least half as large again as before the war. When he wrote, the first year (intermediate) classes contained a number of students which was double that for which accommodation was provided, and the classes were double-banked. The same procedure would be required in Anatomy and Physiology. There was obvious need for more room, more demonstrators, and more equipment. He gave details of the pressure on the space in the Anatomy Department and the difficulty of obtaining subjects for dissection.

Dr. M. H. Watt had resigned his demonstratorship, which was worth only £400 a year, and the salary compared unfavourably with those paid at the University of Sydney. (Dr. Watt was appointed District Health Officer in Wellington in the following year.) The Pathological Department needed a morgue, and a subway to it from the Hospital. More assistance was required in Pathology and Bacteriology, for which the Dean specified a lady graduate, a trained technician, and a boy.

Dr. Ferguson noted the development which had taken place in the clinical subjects, with their consequent subdivision, and the corresponding subdivision of the teaching. He proposed that the Professors of Medicine and Surgery and of Obstetrics and Gynæcology should be the heads of departments and should be assisted by lecturers in the special subjects. It was no longer adequate to employ lecturers on small salaries, who did their work at an actual pecuniary sacrifice, owing to the time thus lost from their practices. The professors should be rendered independent of general practice, but should be allowed the advantage of extending their experience by consulting practice. The suggested salary was £600 to £700 a year, but it had to be remembered that there would not be much consulting practice available, and there might be a risk of attracting only inferior men. The question of separating Obstetrics from Gynæcology had arisen.

The salaries of the Professors of Anatomy and Physiology, and of others in whole-time employment, were below those paid in Sydney, and should be raised. An annual sum was required for the library, and a junior member of the Faculty of Medicine should be made librarian, with a Library Committee.

Dr. Ferguson noted further that Dispensary practice had been approved, but was not yet in being, and that the fifth year students were to have a period of residence in hospital.

About the same time Dr. Church submitted a report, which dealt with much the same subjects. He noted that the clinical teaching was done by an honorary staff appointed by the Hospital Board, who were not necessarily responsible to the University Council. This was unpaid work, and there was no one to co-ordinate it. He suggested a scheme to pay something to all teachers, though only a small sum could be afforded, about £2,500. The Dean should act with the professors to see that the syllabus was carried out.

A sign of the times, and an indication of the crowded state of the School, was a notice that the classes following the Intermediate Examination would begin in October, not in the following March, that the accommodation was likely to be taxed, so that application should be made for places, and that students should not come to Dunedin without having received a favourable reply.

At the end of 1916 Dr. Champstaloup addressed a letter to the Council on the subject of the new buildings, which they can have been little pleased to receive. He stated that the original estimate had been of £13,000, with £2,000 added for equipment. An appeal for £7,500 had been made to the public, and £8,000 had been subscribed. A three-storey building was required, but owing to the war costs had greatly increased, and there had been unexpected expense in securing the foundations, which had cost £1,000 more than the estimate. It had therefore been decided not to complete all three storeys. However, again owing to the war, New Zealand was thrown on its own resources for the supply of doctors; none were now imported from Home, and New Zealanders could not be sent Home to qualify. Consequently the annual entry had doubled, having risen from thirty to sixty, and it seemed probable that it would remain at about fifty per annum. There was great congestion of all class rooms and laboratories, and it had therefore become necessary to complete the building as originally planned.

Dr. Champstaloup asked to be relieved of the office of Sub-dean, his hands being sufficiently full with double-banked classes, and the addition of D.P.H. and Home Science students, besides his hospital and district work. He advised the appointment of Dr. Doris Jolly as Assistant in the Pathology and Bacteriology Departments. This lady was to become very well known later (as Dr. Doris Gordon) as the principal force behind a public subscription raised to provide the salary of a later Professor of Obstetrics and Gynæcology.

Arrangements between the Hospital Board and the Pathology and Bacteriology Departments were to be completed as follows, when the new buildings were opened:—The Board to increase its payment to the University to £650 a year, the University to pay all expenses; the University to take over and pay for the existing equipment when the new buildings were opened.

During this year the Dean and the Chairman of the Medical Committee (Dr. Church) advised the establishment of a Dispensary Department under an Out-patient Physician, under whom students were to attend out-patients and emergency cases at their own homes, the Physician to oversee notes and records and to visit when required. Dr. Ernest Williams was appointed to this post.

On the military side, the Defence Department decided to establish an Officers' Training Corps in the Medical School, for which a Military Committee was required, to consist of the Dean and two members of the Faculty of Medicine, one member of the Dental Faculty, one representative of the District Defence, and three members of the University Council—namely, the Chancellor, the Vice-Chancellor, and the Chairman of the Medical Committee. This committee, of which Dr. Frank Fitchett was the honorary secretary, was allotted a room in the Physiology Department. Dr. Malcolm commanded the O.T.C.

The Otago Division of the British Medical Association, of which Dr. Russell Ritchie was honorary secretary, started a Batchelor Memorial Fund, to which £107 was quickly subscribed, to establish a medal and prize to commemorate the late Dr. Ferdinand Batchelor.

Military honours noted during 1916 were as follows:—Captain J. Bruce Baird awarded the M.C. and promoted captain "for devotion to duty in accompanying ambulances under shell and machine-gun fire." Captain P. R. Woodhouse, R.A.M.C., and Lieutenant Noel Whitten were awarded the M.C., and Captain K. MacCormick and Lieutenant A. V. Short were mentioned in despatches.

During 1916 Dr. Brown, the first lecturer on surgery, died. He bequeathed some money to the University, to which also his widow presented her husband's books.

Another letter of the Dean's is here summarized; it covers much the same ground as that quoted above, but the suggestions with which it concludes appear to have resulted in a "Bursary Scheme," which was in being for some years at the Dunedin Hospital, and requires some further description.

As early as February, 1916, the Hon. G. W. Russell, Minister of Public Health, drew attention to the dearth of medical men in the country. The Dean addressed his letter to the Chancellor in March, no doubt after a meeting of the Faculty of Medicine. The Faculty, he wrote, was much gratified at the Minister's interest in medical education, and at his offer of assistance to the School. The Minister had it in his power to render the course of training more complete and also to provide the junior assistance which his department required in the hospitals. The Dean indicated that, owing to the war, about one-third of the members of the medical profession were absorbed in military work. The course had been shortened by five months, but this did not really increase the number of doctors, and the much larger number of students now entering the course could only become effective in several years' time. This increase in numbers, however, required an increased teaching staff, both on the laboratory and



John H. Steele

From a photograph in the Anatomical Museum, University of Otago Medical School,

clinical sides. He suggested that the training in Public Health would be improved, and the School helped, if the local Health Officer were made lecturer in his subject to the final year students. He also emphasized the importance of the recently qualified doing two years' house appointments, and also that it was undesirable that anyone should enter the Mental Hospitals Service who had not had that experience. He suggested further that the department should undertake the supply of hospital residents throughout New Zealand, some of whom should afterwards take the D.P.H. and enter the Health Department, and others should go either into the Mental or the General Hospital Service. He added a further suggestion that fifth-year students should have a period of residence in Dunedin Hospital and live in the old Nurses' Home. This appears to have been the germ from which the bursary scheme was developed.

Mr. Russell seems to have wished to "democratize" the medical profession; he wanted bursaries to cover the students' whole time, so that the public might be served by "democracy." He might have spared himself any anxiety on the subject, for, as anyone who knew the parentage of the medical students in general could have assured him, a very large proportion of them had fathers who were engaged in small businesses and an appreciable number whose fathers were employed in manual labour; there were few

"... spurns

Which patient merit of the unworthy took"

at the University of Otago.

At any rate, the Minister propounded a bursary scheme, for which he set aside £1,000 a year to provide £100 a year apiece to worthy students who needed the money. This was also intended to provide a "wider field" for selected students, who were to serve for two years in public or mental hospitals after graduation. In practice this meant that the bursars undertook to do two years' hospital residence after they were qualified. Ultimately six bursars were selected—Messrs. C. S. Hicks, R. B. Watson, R. S. J. Fitzgerald, F. J. Appleby, L. C. Mail, and J. R. Cuthbert—who were to reside in hospital, and were paid £150 to £200 a year, out of which they paid for board and lodging.

In the following year Mr. Russell proposed to extend bursary arrangements in the Medical School for students who were unable to pay fees; these bursaries were not for competition; £25 was to be paid in the first year, £50 in the second, third, and fourth years, and £100 in the fifth.

A later suggestion was that there should be bursaries of £10 per annum for students living at home, to be increased to £30 for those away from home, with certain modifications for University bursars; the selected students must hold higher leaving certificates. These schemes were, however, allowed to drop, and ten final-year bursaries were established, at £100 a year.

The scheme did not work in quite a satisfactory manner. During

this year a number of fifth-year students were employed as house surgeons, for which they were paid £2 a week, and it was decided that the bursars were not to receive their bursaries and also house surgeons' pay—they must be one thing or the other. Next year the bursars complained that their bursaries turned out to be worth £40 a year less than they had been promised. They had understood that their bursaries would cover board, residence, and fees, and also provide money for books and instruments; further, they were to have had a preference in house appointments, but now they found themselves forbidden to take temporary house surgeoncies at £2 a week, and they were required to pay tuition fees. The Hospital Board demanded £80 for their accommodation, the high price being charged in order that the Board might recoup itself for structural alterations it had made. This only left £20 over from the bursary, but the tuition fees were £29, and another £10 or so was required for books and instruments, which left them £20 out of pocket. They were thus, as they affirmed, worse off, or at any rate got less for their money, than the Knox College students, who paid £33 15s. for board and lodging, and with the other expenses paid only a total of some £73, for which they could recoup themselves to the extent of about £24 from house surgeon's fees. Once at least the bursars discussed resigning their bursaries to become house surgeons.

Later on, the Hospital Board agreed to reduce the charge for board and lodging to £40, or 30s. a week for 26 weeks; afterwards the charge was raised to £50, or 27s. 6d. a week when in residence and 5s. a week when out of residence.

The bursars were required to take house appointments for two years after qualification, at salaries from £150 to £200 a year, and to enter into a bond of £100 to that effect. After the two years they might be employed in the Public Health or Mental Hospital Services, when they were to be granted facilities to take the D.P.H. or the D.P.M. (if the latter were available). These bursaries continued to be held till 1921.

Meantime, the Military Service Act had been passed, which introduced conscription, and the medical students began to find themselves in a reserved occupation, and also to receive white feathers. However, as the Chancellor pointed out, the Medical School had practically become part of the Defence Department. In 1916 three medical students had enlisted, and had been exempted. But Mr. Russell only asked for the exemption of men in the fourth and fifth years, and in February, 1917, he wrote to the Chancellor: "The urgent need of the Empire at present is men to fight, and the question of occupation is to my mind to a very large extent a secondary matter . . . You will understand that we have to face the country as the originators of the Military Service Act, and . . . nothing but the most extraordinary circumstances would justify the Government in asking the Military Service Boards to exempt single men . . . while others are being compelled to go and serve the country in the firing line."

The third-year students were given time to sit their examination, but if they failed to pass they ceased to be exempt. The University Council thought that this exemption of only the fourth and fifth years was not in the public interest, and the Minister of Public Health was asked to arrange a conference between his department and the University in order to devise satisfactory arrangements for medical students; the conference, however, was not held. The Dean expressed himself with considerable force on the suggestion that the medical students were shirkers. There was, he said, much unrest among them; both staff and students were anxious to serve, and he invited General Henderson, the Director of Medical Services, to address them. The General told them that he desired them to remain in the School and maintain the supply of officers needed for the N.Z.M.C. The O.T.C. was founded, and it was suggested that a special badge should be worn, but this was not acted upon. Besides the N.Z.M.C., it was necessary to maintain the supply of house surgeons.

On the 3rd April, 1917, the new Medical School Buildings were opened by Sir James Allen. It was a remarkable feat to have had them completed in war-time, and in the face of a number of other difficulties. The foundations had cost £1,200 more than the estimate, and for economy it had been proposed to cut out part of the third storey, but with the increased number of students this had proved impracticable. This had cost an additional £2,000. The architect's statement of accounts, published in this year, was for about £20,000.

But the situation was not without its bouquet-throwing. The Registrar wrote to the architects and to the contractor in appreciation of the satisfactory building erected. Messrs. Mason and Wales recognized the value of the suggestions made by Dr. Ferguson and Dr. Champtaloup. Messrs. Fletcher Bros., the contractors, replied that they had worked on the most complete set of plans ever submitted in their experience, and, under the architects' supervision, it had been a pleasure to carry the work through. Shortly afterwards the Chancellor advised the Minister that the new buildings had cost nearly £5,000 above the estimate. He drew attention to the fact that the University was to receive an additional income of £2,500 a year from the increased rents from their reserves, and asked the Government to advance £5,000 on that security.

The Honorary Staff of the Hospital subscribed an additional £250 for the buildings, completing £1,000, through Dr. Newlands, and later added £30 more.

In July the Dean presented a report on the annual increases in expenditure to be anticipated in the next five years, which were incidental to an annual entry of fifty students. For Anatomy he required one whole-time and one part-time assistant, a second laboratory assistant, and additions to the Museum, at an increase of cost of £1,000 a year. For Physiology there were needed one whole-time

assistant, a junior demonstrator, a second laboratory assistant, and expenditure on the library—a further increase of £1,000 a year. For Bacteriology, one whole-time assistant (qualified), a second assistant (unqualified), a typist, and also expenditure on the library. For Pathology, first and second assistants, a laboratory boy, and a typist. In brief, Anatomy and Physiology, then each costing £1,400 a year, would each cost £2,400. Pathology, then costing £1,350, would cost £2,350, and Bacteriology, then costing £1,250, would cost £2,250.

The Dean contrasted Otago with Sydney and Melbourne, in both of which the cost was much higher; for one thing, the professors there were paid £1,000 a year, while at Otago they received £700.

A little later he pressed for the transfer of the Medical Library to the Medical School. Meantime, Dr. Russell Ritchie, honorary secretary of the Otago Division of the B.M.A., suggested that the Library Committee of the latter should be associated with the Medical School Library Committee for joint control. The £30 subscribed by the Honorary Staff of the Hospital was earmarked for furnishing the library. The B.M.A. elected Drs. Colquhoun, Fitchett, Champtaloup, and Drennan to the committee, but the joint control does not seem to have been adopted. Dr. Chilton, of Canterbury College, had already made a present to the library of slides and of books dealing with Diseases of the Eye. Dr. Stuart Moore offered the loan of his books on Hypnotism and Psycho-Analysis, subjects of which he had made a close study. The physiological journals were transferred to their own department.

The administrative difficulties of the period were clearly very great. Doubtless there was too much preoccupation with the war for much thought to be given to a second Medical School in another centre, but apparently Mr. Russell suggested to the Chancellor that the fourth and fifth years should go elsewhere, but the latter, no doubt prompted by the Dean, stated that the syllabus included lectures on Medicine, Surgery, and Gynæcology to the fourth year, and on Medical Jurisprudence, Public Health, and Ophthalmology to the fifth. If these lectures were given elsewhere it would mean an expensive increase in the number of teachers and the establishment of four inferior schools instead of one strong one. There was added a note to this effect: "The Council of this University is seeking as soon as possible to have whole-time teachers in Medicine, Surgery, and Gynæcology instead of lecturers, who give their chief attention to private practice." Facilities were requested for paying the necessary higher salaries.

The Pathology and Bacteriology Departments were moved into the new building, and Dr. Champtaloup was asked to act as District Health Officer. He pointed out some of his difficulties in a letter to the Council. He had lost Dr. Doris Jolly from ill-health, his laboratory assistant, Mr. Andrew Logan, was in camp, and he himself was now called upon to act as District Health Officer, in addition to his teaching, his Sub-dean's work, and the laboratory work for the De-

fence Department, for the Hospital, and for the District. He and Dr. Drennan proposed that Miss Gladys Cameron should succeed Dr. Jolly, and this lady was appointed after an interregnum, when the work was done by four students. Meantime it was proposed that Dr. Drennan should teach Medical Jurisprudence, and Dr. Fitchett Toxicology, which the latter declined, and Dr. Drennan undertook the whole, with Miss Grace Stevenson and Miss Cameron as whole-time assistants in the two departments and with a typist. In the Anatomy Department Osteology was taught by two senior students.

The students, not for the last time, complained of the standard demanded of them in Physics in their first year.

Naturally, there were difficulties in obtaining sufficient Obstetric cases. In 1915-16 there were 100 cases at Forth Street and 13 at Redroofs for 42 students; in 1916-17 there were 139 at Forth Street and 19 at Redroofs. This small number at Redroofs did not appear to be worth the £52 a year which was paid, and the Dean suggested that the Salvation Army should be asked to accept £1 1s. for each case, to which the Army agreed. J. A. Jenkins was awarded the first Batchelor Medal.

Dr. Malcolm resigned from the University Council, and was succeeded by Dr. Ferguson, who was also elected to the Senate of the University of New Zealand. In this year the Hospital Board approved of the appointment of eight bursars.

During the year the following distinctions were recorded, in the war and elsewhere:—Major Peter Buck (Te Rangi Hiroa), D.S.O.; Captain C. E. Hercus, D.S.O., and promoted major; Major K. McCormick, D.S.O. The Military Cross was awarded to Captain W. C. Hartgill, R.A.M.C., Captains S. Ll. Serpell, R. H. Baxter, W. Aitken, J. G. Crawford, A. D. Nelson, A. G. Reid, R.A.M.C. (a former student), and J. G. Stewart (later a medical student). R. H. Hogg became O.B.E., and D. E. Fenwick, G. E. O. Fenwick, and Captain R. L. Withers were mentioned in despatches.

Dr. Truby King was made C.M.G., and Dr. Marshall Macdonald was appointed Consulting Neurologist to the New Zealand Hospitals in England.

In this year also Dr. Ogston died. He was one of the oldest surviving teachers of the School, and the University Council expressed its deep regret.

CHAPTER XIV

1914 — 1920 (Continued)

THE year 1918, in which the war came to an end, gave small promise of the close of hostilities at its beginning, and the records indicate little but the difficulties of conducting the School under war-time conditions.

In April the Dean presented a report on the new buildings; they were satisfactory, except that a still unstopped spring in the basement was flooding the boiler house. Always keen on the planning of new buildings, he wished to secure some cottages in a neighbouring street for the erection of a *post-mortem* block. He reported the return to duty of Dr. Stanley Batchelor, after a serious illness, and the absence on military service of Drs. Marshall Macdonald, Stuart Moore, and Sydney Allen. There were 48 first-year students in Dunedin alone, with an unknown number in other centres. No exemption from military service was granted to the second year. Dr. Allen had been succeeded as Surgical Tutor by Dr. W. E. Carswell. The Acting Superintendent at Seacliff Mental Hospital, Dr. A. C. McKillop, had been asked to arrange systematic and clinical instruction in Mental Diseases. Dr. A. J. Cottrell was awarded the Traveling Scholarship and also the Batchelor Medal.

The students found that their common room in the School left something to be desired, which they indicated to the Dean. Dr. Ferguson pointed out to the Council that some kind of floor covering and a gas fire were required there, with facilities for making tea. The staff afterwards subscribed £25 for this purpose. Also, more books were needed for the students' library, since they were not admitted to the staff library.

Dr. Drennan was appointed honorary librarian at the School. Dr. Ogston's books were presented, and those of the late Dr. Henley were purchased. Several members of the staff presented their own copies of the current journals, including the *British Journal of Ophthalmology*, the *Annals of Surgery*, and the *Journal of Endocrinology*; other donations came to about £100. The journals were overhauled and attempts were made to obtain missing numbers. Dr. Drennan submitted a list of the books most urgently required, which were to cost about £24. The Otago Division of the B.M.A. asked leave to hold its meetings at the School, which was granted, and the Division made a gift of £20 to the library.

The Staff in this year were:—Physicians, Drs. Colquhoun and Fitchett; Assistant Physician (also in charge of children), Dr. E. H.

Williams; Surgeons, Drs. L. E. Barnett and W. Newlands; Assistant Surgeon, Dr. W. E. Carswell; Gynæcologist, Dr. F. R. Riley; Ophthalmic Surgeons, Drs. H. L. Ferguson and A. J. Hall; Pathologist, Dr. A. M. Drennan; Dental Surgeon, Dr. H. P. Pickerill. There is a note that the Otago Hospital Board had put the Medical School teachers on the Hospital Staff. In this year the Board sanctioned the appointment of eight bursars.

The usual difficulties continued over Obstetrics. Further attempts were made to obtain admission for students to St. Helens Hospital, but Miss Maclean, Assistant Director of Hospitals, refused this. However, she made the suggestion that all pupil midwives should attend St. Helens, and leave the Batchelor Hospital to medical students alone. A little later a meeting was arranged between the Hon. G. W. Russell, Minister of Public Health, the Chancellor, Mr. T. K. Sidey, Dr. Ferguson, Dr. Church, and Dr. Frengley, of the Department of Public Health, and the question was raised again. Dr. Frengley said that St. Helens must be closed (presumably if it was impossible for students to use it), and all cases must be sent to the Batchelor. The Minister asked Dr. Frengley to submit a report. It was asked if facilities could be given at Timaru and similar towns, and it was said that they could be used by students in holiday times.

Towards the end of the year, but before the conclusion of hostilities, arrangements were made for the return of medical students to the School under the following conditions:—

1. Those who had passed the Intermediate Examination were to be retained in the School.
2. Those in camp were to be recalled, and these were required to pass the First Professional Examination within 36 months, or other period approved by the Faculty of Medicine.
3. Any whose work was unsatisfactory were to be referred to the military authorities for review.
4. All those retained must join the O.T.C.
5. Those at the Front were to be released as practicable.
6. The students thus exempted were under obligation to do two years as house surgeons, or in other public service.

Mr. C. S. Hicks (later Sir Stanton Hicks and Professor of Physiology in the University of Adelaide), a medical student but a Master of Science and trained in Chemistry, was established in a laboratory in the Medical School as Public Analyst.

During this year Dr. Roberts resigned the Chair of Pathology, and was succeeded by Dr. Drennan.

A movement was set on foot to obtain some recognition of the services to the University of the Chancellor, the Rev. Andrew Cameron, and the Vice-Chancellor wrote to the University of Edinburgh and requested that body to consider the grant of an honorary

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degree to the Otago Chancellor. He remarked that the University of New Zealand gave no honorary degrees, and that "in a case of this kind we naturally turn to Edinburgh." Edinburgh replied that honorary degrees had been suspended for the period of the war: but in the following year the honorary degree of LL.D. was conferred as requested.

Honours obtained by former students during the year were the following:—C.M.G., Colonel E. J. O'Neill, Major L. E. Barnett; C.B.E., Lieutenant-Colonel W. M. Macdonald; O.B.E., Captain Hugh Short; D.S.O., Lieutenant-Colonel Hardie Neill (and Belgian Croix de Guerre), Major Frederick Cameron, Major E. A. Widdowson; M.C., Captains P. B. Benham, J. D. Marks, W. G. Borrie, John Connor, K. E. Gordon, P. Ardagh; Belgian Croix de Guerre, Captain R. A. H. Fulton; Mentioned in Despatches, Lieutenant S. G. Scoullar, Surgeon R. Buddle, R.N.

In this year also Dr. Lindo Ferguson was awarded the C.M.G. He was the first medical man in the Dominion to be granted an honour for services other than military. The Professorial Board expressed itself in the following minute:—

The Professorial Board offers its sincere congratulations to Professor H. L. Ferguson, M.D., on the honour recently conferred upon him by His Majesty in making him a Companion of the Most Distinguished Order of St. Michael and St. George. The Board is of opinion that the people of the Dominion owe a debt of gratitude to Dr. Ferguson for his wholehearted and successful efforts to bring the School of Medicine to as high a pitch of excellence in regard to appliances and accommodation as it already is in personnel. It is much gratified that his long service to the School should have received so appropriate a recognition.

Late in the year Dr. Colquhoun addressed the following letter to the Chancellor:—

218 High Street,
Dunedin,

October 31, 1918.

My Dear Dr. Cameron,

Many thanks for your kind enquiries as to my health. I am very much better, but I feel this attack has been severe and crippling.

Now that the war seems to be coming to an end I am anxious to be relieved from the University and Hospital work, and if your Council can make arrangements for next year I shall be glad if you will accept my resignation from the University. I need hardly say that I shall meet your wishes in any way I can if my successor should not be able to take up duty exactly at the beginning of the session.

Very truly yours,

(Signed) D. Colquhoun.

Dr. Colquhoun was, very properly, thanked by the Council for continuing to hold his appointment and for his offer of assistance. The Council's views were more specifically expressed in a minute of the following year:—

The Council has already, at a meeting held in July, 1914, expressed its great indebtedness to Professor Colquhoun for the manifold services rendered by him to the cause of medical education in New Zealand. At

the present time it is the desire of the Council not only to affirm its previous resolution, but also to express its added sense of indebtedness to Professor Colquhoun, who, after a period of nearly thirty years' service, continued, at the request of the Council, to carry on his duties for the period of the war. Now that it has become possible to release Dr. Colquhoun, the Council expresses the hope that in his retirement he may have every happiness.

Shortly after this Dr. Colquhoun was made Professor Emeritus. Dr. Fitchett was asked to act as Professor of Medicine for one year, at a salary of £600, without prejudice to his permanent appointment to the Chair. He had volunteered for military service, but had been kept back for teaching duties.

Shortly before Dr. Colquhoun's resignation a certain generous gift to the University completely altered the position of Medicine in the curriculum, and led indeed to a reorientation of the whole teaching of the clinical subjects.

In the University Council Minutes of 20th August, 1918, it is written that Mrs. Mary Glendining, widow of the late Robert Glendining, formerly of the firm of Ross and Glendining, Warehousemen and Softgoods Manufacturers, of Dunedin, had offered the sum of £8,000 to endow a Chair in the Medical School.

A claim for a Government subsidy was put in to the Director of Education, with the following note:—

I forward you herewith copy of a letter from Mrs. Glendining, intimating her wish to donate the sum of £8,000. It has been decided by the Council to apply this gift to the Department of Medicine in the Medical School, but full arrangements have not yet been made. It will, however, be necessary to take steps in the near future, as Dr. Colquhoun, the present occupant of the Chair, has asked to be relieved of his duties as soon as possible.

To this the Director of Education replied:—

The claim for subsidy of £8,000 on Mrs. Glendining's donation of a like amount will be considered when the Council has arrived at a decision regarding the expenditure of the interest derived from the donation and the subsidy. It is noticed that Dr. Colquhoun, the present Professor of the Practice of Medicine, receives a salary of only £200. It would therefore appear that the Council has in view the placing of this professorship on a different footing from that obtaining in the past. Will you please notify the department when a decision is arrived at in order that the question of a subsidy may be favourably considered? The amount is a large one, and for the purpose of audit and record it is necessary that full details should be supplied and submitted to the Minister. This information should include the salary proposed to be paid.

Some six months later, in 1919, the department approved the plans and salary, and promised the subsidy. The Chancellor advised the Governor-General of the gift, and that the Council was inviting applications for the posts of Professor of Systematic Medicine, Professor of Clinical Medicine, and Lecturer on Clinical Medicine.

The *Otago Daily Times*, discussing the subject, approved the suggestion of full-time Chairs in Medicine and Surgery. A good deal of

advice was asked, and a note from the Dean of the Melbourne University School of Medicine may be quoted: "Organize the staff for research and the teaching will be all right." The Otago School had twenty years to wait before this suggestion was to take effect. As far back as 1916 the Chancellor, in a speech, had advocated research. Up till then only pioneer work had been done; it had become desirable for the professors to have assistants, and to devote time to research.

In November of this year the first suggestion of new buildings for the Departments of Anatomy and Physiology, on a site in the neighbourhood of the Hospital, appears in the University correspondence.

The year 1919 thus opened with a number of new problems presented for solution. The war was over, normal life had to be re-established in the School, but the School had meantime grown almost out of recognition, the standard of medical education had risen and was still rising, and expensive new buildings and equipment were required.

The establishment of the new Chairs of Medicine involved a considerable reorganization of the whole curriculum, and also there were the reforms which had been thought desirable at the time of Ferguson's appointment, but had had to wait for the war to end. These were taken in hand. A large programme.

The most important matter was, without doubt, the greatly increased number of students. As has been seen, in the early days each academic year contained only a few, and a relatively large group of New Zealanders went Home, chiefly to Edinburgh, for a medical education. That became impracticable in the war, and the immigration of doctors also ceased, and it was thought probable that in future most New Zealanders would complete their courses and qualify in New Zealand, as has turned out to be the case, and there any weaker vessels have certainly pursued their studies with greater security and probably with much greater application.

At a rough estimate, it was thought that the qualification of fifty doctors a year would supply all the medical needs of the public. There were about a million people in the country; one doctor *per mille* was considered sufficient in Great Britain, and a thousand doctors could be maintained with an annual issue of fifty, if the average period of practice was twenty years; the latter figure is an under-estimate.

But men, and women, began to flock into the profession, including a large number of returned soldiers. It may be remarked in passing that the soldiers' "years" were the best within the teachers' recollection. The soldiers were, of course, much more mature, both in age and outlook, and a year or two of military discipline had made a great difference in their appreciation of the value of order and all that that implies.

As an instance within the writer's experience: he had to undertake the clinical examination of about seventy students, and he sent

for the "year representative" to discuss the necessary arrangements. The representative was a returned soldier. The examiner said: "I will take two students a day, five days a week, and I will start on Monday, the first of next month." The other replied: "Then you will want thirty-five days; very good, sir." Next day the examiner received a typewritten list, in which each student was detailed for his day. The names had been put in a hat and drawn by a committee. This was all done unofficially, not in the Registrar's office, and every morning two students were ready waiting on the mat at 9 o'clock. The same would not have been done within the precincts of the University of Oxford, *consule Planco*, nor indeed at the University of Otago a few years later.

In 1918 the number of students in the School was 275, and the Dean remarked in his report to the Chancellor that in five years the School had trebled its numbers and had grown from small to large, and was, indeed, "one of the most important in the Empire in point of size," as large as that of Melbourne had been five years before. In 1917 there were 227 students, in 1918 275, in 1919 340. The increase had completely outrun the estimates made two years before.

The Chancellor, in a letter to the Director of Education, stated that the number of University students (all faculties) had increased to 800 (sometimes the figure given was 900), so that there was a deficiency in class rooms, and double-banking was required. The dissecting room had been built for 70, and now had 132. Another department, built for 55 students, had 155. This could not go on; he invited a visit from the Director.

In the intermediate departments the Biology classes were double-banked, and neither the Chemistry nor the Physics Departments could accommodate their numbers.

Dr. Gowland reported overcrowding and made suggestions. He, too, was duplicating his classes, under protest, and asked for increased assistance.

Dr. Malcolm added his request for a junior assistant, and even offered to pay half the salary out of the increased fees.

The National War Funds Council distributed a number of bursaries among returned men; twenty-five out of thirty-seven applications in Dunedin were for the Medical School, of which some twenty-one were approved. In a deputation to the Minister of Education the Chancellor and the Dean pointed out that since the Government had encouraged students to enter the School by the gift of bursaries it was their duty to provide adequate accommodation.

Extensions were required which would cost £40,000, and money was needed for research. These were not stable figures: only a few months later a deputation waited on Sir F. Dillon Bell, the Minister of Education, when the Dean pointed out the *national* character of the School. Of its 300 graduates, 200 had served in the war, a supply of two medical officers every month for the transports had been maintained, and officers had been supplied to the Health and Educa-

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tion Departments. The income of the University was £15,000 below requirements, and the Medical School needed £100,000. Sir Francis recognized the national character claimed, and promised to recommend to the Cabinet the grant of a sum of money, amount unspecified.

The question of limiting the numbers allowed to enter the School was raised, and a motion was proposed in the Professorial Board that "In the interests of efficient teaching, it is necessary to restrict the numbers joining the science classes for the Intermediate M.B. Examination in the coming session, since the numbers entering in 1919 exceed the accommodation provided." Nothing came of this at the time, but a similar proposal in later years brought a hornets' nest about the ears of the University authorities.

As one means of keeping down entrants it was proposed to raise the standard in the Medical Preliminary Examination. Certainly it was seriously felt that too many were entering the medical profession for the country's needs.

The necessary accommodation for Anatomy and Physiology was settled during 1919. As has been mentioned, the notion of a building in King Street for this purpose had been adumbrated in the previous year. In a letter to the Chancellor dated 14th March, 1919, the Dean, after describing the overcrowding at some length, continued: "In view of the probable suggestion of new buildings on the Tanna Hill site (in the neighbourhood of the University) for Physics and Biology, and the unsatisfactory result of makeshift additions to existing departments, I would suggest for the consideration of the Council that the Anatomy and Physiology Departments be handed over to Physics and Biology, and that new Anatomy and Physiology Departments be built alongside or in the immediate neighbourhood of the new Medical School." There was also a good deal more in the letter about the money required by the Clinical and other departments.

On July 4, at a special meeting, the Faculty of Medicine passed the following resolutions: "1. That it is in the best interests of medical teaching that all the departments dealing specially with medical subjects should be in close touch with each other. 2. With this object in view, it is highly desirable that in place of additions to the Anatomical and Physiological Departments on their present site a new site in the immediate neighbourhood of the new Medical School and Hospital should be obtained, on which the Departments of Anatomy and Physiology should be erected, with room for further expansion. 3. As a rider to (2), such an arrangement would greatly facilitate the development of the Departments of Pharmacology and Bio-chemistry, which naturally must be in close association with the Departments of Physiology, Pathology, and Clinical Medicine."

There were a few dissentients among the non-medical members of the Faculty. The resolutions were submitted to the Professorial Board on July 4 and approved.

Armed with this approval, the Dean moved in the University

Council, on July 15, that this scheme should be submitted to the Minister; the motion was lost by ten votes to three. A few days later the Otago Division of the B.M.A. supported the Faculty of Medicine, and asked the Chancellor to call a special meeting of the Council to receive a deputation, and the Faculty of Medicine also sent in a letter of protest.

The question was resubmitted to the Council, and things must have moved quickly, for not later than August 13, in less than a month's time, plans for the new School were submitted to the Education Department, but only on the understanding that new Physics and Biology Departments were to be built first.

A sketch plan was produced of a building in red brick, faced with Oamaru limestone, with a frontage of 400 feet. The total cost was to be £53,000.

The necessary decisions were taken about the appointments for the teaching of medicine and the application of the Glendining Fund as follows:—Three appointments were to be made, of a Mary Glendining Professor of Systematic Medicine, a Professor of Clinical Medicine and Therapeutics, and a Lecturer on Clinical Medicine, at salaries of £600, £500, and £400 respectively.

The Professor of Systematic Medicine was to deliver a course of 100 lectures on his subject, and give ten hours of clinical instruction in the Hospital per week. He was allowed private practice in medicine, but was debarred from surgery, midwifery, and club practice.

The Professor of Clinical Medicine and Therapeutics was to deliver a course of lectures on *Materia Medica*, and also to give ten hours' clinical instruction per week. He was allowed private practice, but no clubs, and it was specified that his practice must not interfere with his teaching duties.

The Lecturer on Clinical Medicine was also to give ten hours' clinical instruction per week in the Hospital wards and Out-patient Department, and his practice was likewise not to interfere with his teaching.

The appointments were each for five years, and were then terminable on six months notice on either side. Candidates were not wanted under thirty or much over forty-five years of age. They were required to subscribe to the Teachers' Superannuation Fund, into which the beneficiaries paid 5 per cent. of their salaries if joining under thirty years of age, 6 per cent. if above thirty and under thirty-five, 7 per cent. above thirty-five and under forty, 8 per cent. if over forty. The obligation to subscribe to this fund was very unpopular with professors who joined late in life and on comparatively large salaries, since the amount of pension was limited to £300 a year.

The appointments were advertised in Great Britain and in the Australian and New Zealand papers. British candidates were to be reported upon by a Board of Advisers under the High Commissioner, then Sir Thomas Mackenzie. The appointment was to be made by the University of Otago. The Board consisted of Sir William Osler,

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Bart. (Oxford), Professor J. M. Beattie (Liverpool), Dr. James Craig (Dublin), and Dr. G. L. Gulland (Edinburgh).

The candidates were "disappointingly few," probably because an appointment in South Africa at a much higher salary was advertised at the same time.

The candidate recommended by the Board for the Mary Glendining Chair was Dudley William Carmalt Jones, M.A., D.M. (Oxon.), F.R.C.P. (Lond.), Physician to Westminster Hospital, and formerly Dean of its Medical School, who was then forty-five years of age. He was educated at Uppingham, Corpus Christi College, Oxford, and St. Mary's Hospital, London, where he had held the junior medical appointments and had been an assistant in the Department of Therapeutic Inoculation, under Sir Almroth Wright. He had also held house appointments at the National Hospital for the Paralysed and Epileptic, Queen Square, London, had been Assistant Physician at the Seamen's Hospital, Greenwich, and at the end of the late war Consulting Physician to the E.E.F. He was appointed by the University Council.

The successful candidate for the Chair of Clinical Medicine and Therapeutics was Frank Fitchett, M.D. (Edin.), a Dunedin man, son of the Dean of the Anglican Cathedral. He was educated at Christ's College, Christchurch, and entered the Medical School at Otago, but migrated to Edinburgh University, where he qualified in medicine and took the degree of M.D. and served as House Physician at the Royal Infirmary and also at one of the Scottish asylums. He served as a civil surgeon in the South African War, and then returned to Dunedin, where he joined the Hospital Staff and held a number of appointments at the Medical School, as has been noted above. At this time he was Acting Professor of Medicine.

Dr. J. T. Bowie was appointed Lecturer in Clinical Medicine.

The appointment to the Glendining Chair gave by no means universal satisfaction. There was a strong local candidate, who, in the opinion of many people, was entirely suitable for the post. The Prime Minister, the Rt. Hon. W. F. Massey, wrote to the Council and noted with displeasure that it had seen fit to go outside New Zealand to make this appointment. Other things being equal, preference should be given to eligible New Zealanders. The Otago Division of the B.M.A. made a similar protest, specifying the local candidate.

The conditions of appointment, as advertised, give a good example of the misleading character that statements may have which are intended to be quite straightforward. Such an advertisement as that for the first appointment, if it had related to one in London, would have implied the existence of consulting practice, which would have been assumed to be sufficient at least to double the salary, since all practice but that of medicine was forbidden. In fact, consulting practice hardly existed at the time, and there was no demand for it on the part of the public. It is probable that those who framed the terms expected that both Chairs would be filled by local candidates, with

established family practices on which to rely, their salaries being only compensation for the time which they lost from practice on account of teaching.

The following letter was received by the University Council:—

Office of the Minister of Defence,
Wellington,

3rd February, 1919.

Dear Sir,

His Excellency the Governor-General (the Earl of Liverpool), in a letter dated 28th January, suggests that the surplus moneys of the Hospital Ships Fund might be utilized for the erection of a hall at Dunedin to be used in combination with the training of the medical students at the Medical School. The idea would be that the students would be instructed in all the subjects which are essential for the training of men in the medical science of war, and where lectures and experiments in ambulance work could be given and carried out.

His Excellency has asked me to ascertain confidentially if a site could be provided by the University. Would you please let me know? At the same time, might I have your opinion about the suggestion made for the disposal of the funds? Perhaps you have some better proposal to put forward.

Yours faithfully,

(Signed) J. Allen,
Minister of Defence.

The Chancellor,
University of Otago, Dunedin.

A committee was appointed, and Surgeon-General Henderson, Major-General Sir Alfred Robin (O.C. Troops in New Zealand), and Colonel Sleeman were invited to attend a meeting thereof. The site suggested was to the north of the Students' Union, and was then occupied by a Home Science building. It was to measure 70 feet by 40 feet, and the building was to cost £5,000; the architect's estimate was £6,786; the sum of £8,000 was available. It was to be called "The Marama and Maheno Hall," not "The Liverpool Hall." The contract was ultimately signed for £7,332. *Marama* and *Maheno* were the names of the hospital ships.

Dr. Jack, the Professor of Physics, protested against the erection of the drill hall for the O.T.C. on University ground, which would soon be needed for academic purposes—the proposed new Physics laboratories were not yet in being. However, the protest came too late; the Council was committed to the project.

Towards the end of the year His Excellency laid the foundation stone of the hall. He remarked that New Zealand had, with the King's approval, provided hospital ships for the late campaign. An appeal made to the public for equipment had yielded £65,023, of which some £8,000 was unexpended. Surgeon-General Henderson had suggested the building of a hall for the training of medical students at Otago University. Five hundred and seventy-three students had served in the war, of whom 104 had died, and 64 had been awarded decorations. The ships had carried 47,547 patients.

At the end of 1918 the pandemic of influenza had struck New Zealand with great severity, and all available medical personnel had

been called in to assist, including Drs. Malcolm and Gowland, neither of whom was in practice. These each received fifty guineas for their services, which they made over to the University. The students were also extensively employed in organized work. The seniors went to districts without doctors or acted as Hospital residents, and the juniors took the place of nurses. They were considered to have given very valuable services, and were paid for them. Dr. Barnett donated the curious sum of £55 2s. 6d. in appreciation of the work done by them. The gift was to carry subsidy, and be expended on amenities for the students; it appears ultimately to have gone to their library.

This was by no means the end of Dr. Barnett's generosity. In the following year he made a "Jubilee Donation" to the School of £1,000 for a "fund to be established for providing the cost of such improvement at the Medical School as may be recommended by the Dean and the Faculty of Medicine, more especially in the direction of supplying such extra books and equipment for both the staff and students' libraries as would not otherwise be obtained from the customary University contributions."

Other contributions to the library were from Dr. Hector, who gave books from the collection of the late Dr. Ross, at the instance of the latter's family. Colonel Baldwin presented a collection of Maclise's plates. Dr. Drennan reported negotiations for American works with the Rockefeller Institute, the Macmillan Company, the Wistar Institute of Anatomy and Biology, the Surgeon-General's Library, and the Carnegie Institute. He noted that members of the staff were paying the subscriptions for a number of the journals.

The B.M.A. requested the use of the School buildings for the first of its congresses to be held for five years. This was granted.

Dr. Drennan succeeded Dr. Champtaloup as Sub-dean. Both of them informed the Council that they had quite outgrown their accommodation. Dr. Champtaloup suggested that the District Health Officer for Dunedin should be an experienced man, and, following this, Dr. Hughes was appointed, the Chief Health Officer permitting him to lecture on Public Health.

The Dean reported that twenty students had qualified in the preceding year, and he noted an increased seeking after academic honours, such as the M.D. and the D.P.H.

Dr. Ferguson also presented £1,000 to make a fund for grants in aid of research, for the publication of original work and the circulation of the same, for additions to the library, and the like.

Research was already moving a little. Dr. Malcolm received a grant of £250 from the Department of Internal Affairs for this purpose, and Mrs. D. Johnson set to work on "The Food Values of New Zealand Fish," on which she published a number of papers. Leave was granted to do the work in the Physiological laboratory. Dr. R. R. D. Milligan was appointed assistant in the Physiology Department.



The Marama Hall

20 IX 00

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The crests are from the plaques between
the windows are are those of
Earl Jellicoe (L.) and the Earl of Liverpool (R.)
Governor General, and of the R.A.M.C.
(Centre)



THE MARAMA AND MAHENO HALL

From a sketch by the Author made for "The Digest," by kind permission of the University of Otago Medical Students' Association.

Dr. Drennan addressed a society on the subject which has provided the most fruitful research hitherto undertaken in this country. "The Prevalence of Goitre in New Zealand and Its Influence on the Coming Generation."

Dr. Colquhoun, rather late in his career, suggested that a woman should be put in charge of the kitchen at the Hospital, and later that Professor Winifred Boys-Smith, of the School of Home Science, should report on "Institutional Dietetics." This was the first move towards a properly equipped and staffed kitchen, and not before it was time, although this was not established for some years. The then existing kitchen was faultily constructed and staffed by cooks who might well have been deserters from ships' galleys, whose productions, in the opinion of hospital residents, might possibly have done for persons with farm labourers' appetites, though that was doubtful, but were entirely unsuited to any more delicate palates.

The appointments to the Honorary Staff made by the Hospital Board for the year 1920 were:—Physicians, Drs. F. Fitchett, W. M. Macdonald, S. A. Moore, and Carmalt Jones; Assistants, Drs. R. I. Ritchie, J. T. Bowie, K. A. Ross; Surgeons, Drs. L. E. Barnett, E. J. O'Neill, F. S. Batchelor; Assistants, Drs. W. Newlands, T. Fergus, W. E. Carswell; Gynæcologists, Drs. F. R. Riley, C. North; Ophthalmic Surgeons, Drs. H. L. Ferguson, A. J. Hall; Assistants, Drs. Winifred Bathgate, A. J. Cottrell; Pædiatrician, Dr. E. H. Williams; Dental Surgeons, Drs. H. P. Pickerill and C. Tait.

Dr. Pickerill had attained great distinction in the war by his work in plastic surgery, for which he was created C.B.E. He opened a department for this work at Woodside, Dunedin, where he continued to obtain most remarkable results in deformities of the face produced by war wounds, human resemblance being restored in what appeared quite impossible cases. A series of wax models of his cases was displayed in the Pathological Museum, as was also a collection of pathological specimens of war interest which was received from the Royal College of Surgeons: for these Mr. Duncan Stout, of Wellington, and Dr. W. M. Macdonald were responsible.

A Bill to amend The Hospitals and Charitable Institutions Act and to separate Bruce and Clutha Counties as a South Otago Hospital Board area from the Otago Hospital Board was introduced in the House of Representatives by Mr. Malcolm, the local member. The Bill was strongly opposed by the University as detrimental to the Medical School, but it was carried. There were some years, on the medical side at least, in which the Dunedin Hospital wards were very poorly filled, and it was felt that this Act was in part at least responsible. In later years the Hospital became much over-filled from its own district.

A few points worth briefly noting which arose during the year may be set down. There was an application for a weekly half-holiday in the interests of Rugby football, which it was found impossible to grant to the medical students on account of their crowded curriculum.

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The old controversy on examining by teachers came up again. The Finance Committee of the Senate held that teachers should examine as part of their duties, which should be covered by their salaries. Otago University held that its professors were not servants of the University of New Zealand, and should not be required to examine for its degrees without payment.

The Medical Students' Association presented to the Council a portrait of Dr. Colquhoun in oils, which was hung in the Medical School.

The regulations for the M.D. degree were revised, not for the last time, and a clinical examination was required for it.

Among the honours recorded for the year was the grant of the honorary degree of LL.D. to the Chancellor by the University of Edinburgh. In the minutes of the Professorial Board occurs the following note, under date 10th July, 1919:—

The members of the Professorial Board have great pleasure in heartily congratulating the Rev. Andrew Cameron, B.A., Chancellor of the University of Otago, on the well-merited distinction of the Honorary Degree of Doctor of Laws to be conferred on him in the month of July by the University of Edinburgh, which comes with peculiar grace at this time in anticipation of our approaching Jubilee celebrations. The members of the Board recognize that the remarkable progress of the University of Otago in recent years, which is evident not only in the large number of students in attendance, but also in the efficiency of the instruction given, is due in very large measure to the sagacity, enlightened policy, and untiring energy of Dr. Cameron, who has filled his high office of Chancellor with rare ability and distinction.

The following war honours were recorded:—Major Randall Woodhouse, second bar to M.C.; N. H. Dempster, A. D. S. Whyte, K. F. Gordon, awarded the M.C.; Majors G. E. O. Fenwick, C. Baigent, E. L. Marchant, and Captain D. E. Fenwick, created O.B.E.

Early in 1920 the Chancellor pressed the Government to buy the land necessary for the new Medical School. Sir Francis Bell, who, as has been seen, realized the national character of the School, put a grant through Cabinet to purchase the necessary land, though not so much land as the Dean would have liked. More money was to come later for buildings. The Cabinet authorized a grant of £13,000 for land, with an additional £4,000 for two other blocks.

The University Jubilee was celebrated in February, 1920. The programme included a reception of delegates, a religious service, a conversazione, and an inspection of the new Medical School, with addresses by Sir Robert Stout and Sir James Allen, garden parties, a concert, and a dinner.

AUTHORITIES FOR CHAPTERS XIII AND XIV.

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CHAPTER XV

1920 — 1929

PART-TIME CLINICAL PROFESSORS CHANGES IN PATHOLOGY AND BACTERIOLOGY

THE post-war problems, which were no doubt common to the whole world, have been indicated in the last chapter in their particular application to the Otago Medical School. They resolved themselves chiefly into the provision of increased accommodation, increased teaching and with better remuneration, extension of the medical course, and research, besides incidental matters of more transitory interest.

Not much progress was made with medical school buildings during 1920. Besides the Medical School, there was a demand for a new Physics building, which it had been agreed should take precedence of the former, its tender was £25,780; and now a new Dental School appeared to be necessary. There was a natural suggestion that this should be built alongside of the Medical School, but this aroused the Dean to a most emphatic statement of the medical case.

The Hospital occupies a complete "block" between four streets, on its north, south, east and west sides. The Medical School stands on the west in King Street, and Ferguson contemplated filling all this side of the block facing the Hospital with Medical School buildings. He therefore opposed the erection of the Dental School on this site, and carried his point, and it was built later in the next block, to the north, on the same side of the street. Ferguson anticipated a refectory and a new library with a reading-room large enough to accommodate 200 students (thus to make a hall large enough for examinations) and also a book-stack, for the library had grown from 800 volumes, many of them out of date, to 3,000 since its removal to the new building. He forecast an increase in clinical specialization, with subdivision of the subjects, and private rooms and laboratories for the clinical professors, among whom he included those of Midwifery and Gynæcology, Pædiatrics, Orthopædics, Military Surgery and Psychological Medicine. He looked for research laboratories, and accommodation for post-graduates, for Public Health, Hygiene, Preventive and Forensic Medicine, and the Public Analyst, besides air-space and an open area with a lawn.

This large scheme existed nowhere but in the Dean's imagination at this time; as an immediate step he wished to see that part of the block purchased which extended northwards from the existing School buildings to the next corner. This was a good deal more than was

needed for the new anatomy and physiology building, and included what was known as "Fogo's Corner" at the northern end, and the total price was £8,225. The Director of Education granted £6,925, and disputed the inclusion of Fogo's Corner. There was considerable difficulty over the purchase; a right-of-way had to be closed, and there was much controversy over its value, till the Public Works Act was invoked, under which property can be acquired in such circumstances. Letters from "Homeless" and persons using similar *noms de plume* appeared in the papers protesting against the sale of the King Street properties. A Committee of the Faculty of Medicine was appointed to consider the plans for the new block, and finally approved them.

The increase in students in the war- and immediate post-war-years is evident from the entries and the total numbers in the School:—

			1914	1915	1916	1917	1918	1919	1920	1921
Entries	---	---	30	37	67	69	61	90	91	80
Total Numbers	---	---	155	141	209	225	265	340	335	345

During 1920 there was some rather vague talk about the restriction of entrants, but nothing very definite was proposed. It was noted that 21 students were receiving assistance from the Repatriation Department, besides 16 who held National War Funds Bursaries. The returned soldier students asked for a reduction in their fees; the men protested that when they joined the School they understood that a certain sum of money would be required to complete the course; they had been away for two years, but for which they would by then have been qualified, and they did not wish to pay the increased fees imposed in 1920; they stated that neither the Education, Defence nor Repatriation Departments gave them help. This reduction was granted.

A six year course was determined upon. Dr. Ferguson went to Australia in 1920 for the last of the Inter-Colonial Medical Congresses, which were succeeded by the triennial Australasian Medical Congresses of the B.M.A., and while there he conferred with representatives of the Faculties of Medicine of the Universities of Sydney, Melbourne and Adelaide. At this conference the following recommendations were agreed upon—(1) that the first year of study should be given to Intermediate subjects only; (2) that a syllabus was required in these subjects which was suited to the needs of medical students; (3) that the course should extend to six years; (4) that a course of practical clinical pathology should be held under a practitioner; (5) that Anatomy, Physiology, Biochemistry, and Pharmacology should be taught in the second and third years.

Of these proposals the six year course was the most controversial, meaning, as it did, that students would be on their parents' hands for another year, and that too when most of their scholarships and bursaries would have lapsed. There was also a profound suspicion among senior practitioners that laboratory work was overdone in the

School, and that the added year would only mean added laboratory work, and the N.Z. Branch of the B.M.A., before which the matter was later discussed, only gave its sanction on the understanding that the additional year was to be spent in clinical work. The Otago Professorial Board agreed to the sixth year, provided that the interests of the other Faculties were safeguarded.

The new Professors of Medicine undertook their duties, and Mrs. Glendining allowed her name to be associated with the Chair founded by her. These appointments were watched with some jealousy; it has been noted that there was a good deal of divided opinion as to the selection for the Glendining Chair, and the opposition was well represented on the University Council, where the Dean's proposals were all met with the most searching, not to say hostile, criticism. Before long, objection was taken to the way in which the Lecturer in Clinical Medicine discharged his duties; he retorted that he was obstructed in his work and not allowed access to the cases, and that there was no proper definition of his functions. Actually the appointment had been little thought out, the duties were difficult to arrange, and the whole thing was unsatisfactory. Dr. Bowie was becoming very busy in practice, and he resigned a post which he must have felt was not worth holding. Reorganization of the appointment was demanded.

The payment of the holders of these appointments produced dissatisfaction among the other members of the staff who were doing similar work for nothing. Dr. Stanley Batchelor wrote to the Registrar and pointed out that he was paid for lectures and clinical lectures when he gave them, but he was paid nothing for ward-teaching, though the Professor of Clinical Medicine and the clinical tutors were paid for doing the same work. The Faculty of Medicine had discussed the payment of tutors.

Dr. Thomas Fergus and Mr. J. Renfrew White had been appointed surgical tutors, with the obligation to give fifty demonstrations a year, as directed by the Professor of Surgery. Thomas Fergus held the F.R.C.S.(Edin.) and was a very sound general surgeon, and one whom the Hospital residents preferred to most others to work for in emergency cases. James Renfrew White* was the first trained orthopædic surgeon to settle in Dunedin; he had been a resident at the National Orthopædic Hospital, London, and during the war he had been an assistant at the military orthopædic hospitals at Shepherd's Bush and Tooting. He returned to New Zealand as Orthopædic Specialist to the Government. Mr. White was much interested in music, which he began to study seriously after his return. He studied musical composition and produced a considerable number of pieces.

In Midwifery, Dr. R. I. Ritchie's salary, which was less than that of the other tutors, was slightly raised.

The Laboratory Technical Assistants presented an urgent request, not their first, for increase in salary. Dr. Champantaloup pointed out the difficulty in retaining the technical staff, and the need to strengthen

* Mr. White was F.R.C.S. (Eng.).

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it. Mr. Kidd had resigned from the Anatomy Department; Mr. Jennings was appointed in his place, with Mr. Wise as second assistant.

The Professors of Anatomy and Physiology protested that no payment was made to their staffs for practical examinations, although these involved a large amount of work for them. They even went so far as to ask the University Council to refuse the use of their buildings to the University of New Zealand for examination purposes, unless the supervisors were paid.

Mr. Bagley, the Hospital Dispenser, asked for improved accommodation for his instructional work.

Another matter of considerable financial importance to the staff was the superannuation scheme, to which all persons recently appointed were compelled to subscribe. The Chairman of the Professorial Board pointed out that the original salary attached to each Chair was £600 a year, and the retiring allowance was £300; the salaries in 1920 were much higher, as were the premiums paid in consequence, but the maximum retiring allowance remained the same; this was manifestly unjust.

During this year a beginning was made in the endowment of Research. The Hon. Treasurer of Otago University, Mr., afterwards Sir John, Roberts, who was a leading Dunedin merchant, offered to found a scholarship, the terms of which were under discussion, when Dr. Malcolm suggested that money should be invested in a Research Fund, the income to be available for apparatus and the like, and that a Research Board should be formed. A little later Mr. Roberts' gift took the form of £1,000 with subsidy, as an endowment for original research in Medicine, the money to be invested and the income used to provide books, assistance and apparatus and to furnish rooms; when help from the fund was received it was to be acknowledged in any paper published on the subject of the research. The first grants from this fund were made in the following year, when Dr. R. R. D. Milligan was granted £15 for a study of the effect of drugs on the mammalian heart, and Dr. J. J. Valentine received £10 for work on nitrogen metabolism, as contrasted after the consumption of cooked and uncooked food.

Protests were renewed in Parliament and to the Minister against the establishment of the South Otago Hospital Board, on the grounds that it would reduce the number of cases admitted to Dunedin Hospital, and so the amount of clinical material available for teaching. The view of the Faculty of Medicine was that the new Board would cripple the finances of the Otago Board and so damage the Medical School. The protests, whether well or ill-founded, had no result.

In Medicine, a new scheme of clinical instruction was drawn up. Excluding annexes, there were only two medical wards in the Hospital for adult patients, one for males and one for females, and there were four physicians on the staff, two professorial and two others, who each had charge of half a ward, or about fifteen beds a-piece.

There was also a Children's Ward under a separate physician. During the first clinical year (of three terms) the students spent one term in a male ward, one in a female ward and one in the children's ward. If they were with a professor in a male ward, they went to a non-professor in the female ward, and *vice versa*. During this year all students spent half a term in small groups in the gynæcological ward, withdrawn from the medical wards. The second clinical year was spent in surgery. Later, medical and surgical work was taken in alternate terms throughout the two years.

The regulations for the M.D. degree were revised; a thesis was required on a medical subject, excluding surgery; there was a paper in Medicine, set and marked by an examiner in Great Britain, and there was a clinical examination in general medicine; a specialist examination might be substituted for the latter, for candidates who had spent two years at work on their specialties.

In Midwifery, the Chief Health Officer, Dr. Valintine, reported that students were attending St. Helens Hospital, a great point gained, and he asked for remuneration of the staff there; the University agreed to pay a proportion of the students' fees to St. Helens; 119 cases were attended at the Batchelor Hospital, 46 at St. Helens and 31 at Redroofs.

The Library was already too small, and increased book space was made by carrying the shelves above the existing bookcases up to the ceiling, where the less-used volumes were placed.

Dr. H. P. Pickerill, with his very distinguished record for such work in England, was appointed surgeon to the Hospital for facial and jaw cases.

Dr. Marion Whyte resigned her position in the Pathological Department and was succeeded by Dr. I. M. Allen; the latter afterwards went to England where he studied Neurology, and returned to New Zealand the best qualified student of that branch to enter practice there.

Dr. H. E. Jeffries, of Porirua, the Wellington Mental Hospital, delivered the lectures on Mental Disease.

Professor Boys-Smith and Miss Gertrude Rawson, of the Home Science Faculty, met a committee of the Hospital Board to discuss Institutional Dietetics.

Dr. James Fitzgerald was appointed a Government representative on the University Council, and afterwards represented the Council on the Hospital Board Committee. The next year Dr. Marshall Macdonald was elected to the Council by the Court of Convocation (the Graduates). In 1920, 91 students entered the School, and 27 graduated in Medicine.

Dr. T. MacKibbin, District Health Officer, was invited and agreed to give the lectures on Public Health without fee.

Dr. Champtaloup returned to New Zealand after a period of leave in England, during which time he was awarded the M.D. and also the D.Sc. with honours by the University of Edinburgh. Unfortu-

nately he soon found it necessary to enter a sanatorium, for which he was granted six months leave of absence by the University Council.

In view of this, Dr. Charles Ernest Hercus was appointed by the Health Department to take Dr. Champaloup's place for the time as Government Bacteriologist. His services were made available to the University, and he was to lecture if required. He became Acting Professor, and was made a member of the Hospital staff. This appointment became very important as will be seen later.

Charles Ernest Hercus had first qualified in Dentistry and then in Medicine, and he was a house surgeon at Christchurch Hospital when the war broke out in 1914. He became Medical Officer to the Canterbury Mounted Rifles and sailed for the Middle East with the Main Body. He served on Gallipoli and was awarded the D.S.O., and there learnt, in a hard school, the importance of preventive measures in military hygiene, and these he was able to put into practice later, as Sanitary Officer to the Anzac Mounted Division, which operated chiefly in Palestine. Hercus was mentioned in despatches five times in all, and was created O.B.E. at the end of the campaign.

In 1921 the spurious financial prosperity of the war and the immediate post-war period came to an end, and the Government found itself seriously short of money, which naturally affected its response to the clamant demands made upon it by many public bodies, including the Medical School. In January the Prime Minister, the Rt. Hon. W. F. Massey, received a deputation of the Hon. J. A. Hanan, the Hon. Mark Cohen, Dr. Ferguson and Dr. Cameron, which was introduced by the Hon. Dr. Collins. The deputation described the serious overcrowding in the School, and asked for a building which would cost £75,000; the whole of this money was not required at once, but it was very desirable that the shell of the building should be put up without delay. The architect's estimate for the shell was later given at £47,000. Mr. Massey was vague in his reply, and talked of a grant of £20-25,000 in the next financial year. A month later he had the temerity to come to Dunedin, where he received a further deputation, headed by Dr. Cameron and Sir John Roberts, who wanted money for both the Medical and Dental Schools.

Very soon after this a deputation waited on the Hon. James Parr, the Minister of Education, when Dr. Ferguson was very explicit. He said: "If you say 'We cannot help you,' then I must ask for a definite instruction from you that we are not to take any more students, but are to send them to Edinburgh or wherever they will go. If after having assumed responsibility for the School, you say you will not find the money for it, you must definitely state what our position is to be in regard to the number of students we may take." He went on to say that the School required an expenditure of £20,000 a year, but it had only £13,000 to spend, and so was going short of essentials.

During this visit Mr. Parr took occasion to remark that he had "a whole-hearted admiration for Dr. Cameron's perseverance. His usefulness was restricted in New Zealand; he should be invested by the British Government with the task of securing the war indemnity from Germany." Mr. Parr was sure he would be successful.

Mr. Parr visited Dunedin again in the following May to lay the foundation-stone of the new Physics Department, when he was assailed again with the application for £75,000 for the Medical School building. This he declined on account of the financial stringency, and like those bidden of old to the marriage, began to make excuse. The number of students entering the School was in excess of the needs of the Dominion, for which alone the Government had any responsibility; limit the entrants to fifty per annum, and if the numbers were thus reduced there would be no over-crowding, and so no need for new buildings.

It may be added that there were renewed protests by the inhabitants against the demolition of buildings in King Street; also the proprietors of the right-of-way claimed £1,000 for its loss; however, the University was authorized to take it under the Public Works Act.

In this year certain extensions to the Department of Biology were completed.

In August Dr. Gowland protested again and vigorously against the over-crowding in his department; the new building was postponed, and nothing had been done. It was "hardly fair to expect his assistants and himself to go on doing double work indefinitely. At first he had had no assistance, and afterwards the students had greatly increased in numbers. His dissecting-room should hold 70 students, it then held 100 in the mornings and another 100 in the afternoons; it was the same in the lecture-room, with the same results in the atmosphere."

In the circumstances, the question of reducing the number of students had certainly arisen. To arrive at this reduction, it was suggested that the students should be selected on the results of the Intermediate examination, and it was decided that all must complete that examination before keeping terms for the First Professional Examination. There was also talk of stiffening the Medical Preliminary Examination; a scientific subject was to be compulsory, and a year after Matriculation a second science subject was to be taken, together with English and a foreign language at a higher standard than that required for matriculation. Latin was to be retained.

Among the demonstrators of Anatomy in this year appear the names of two prospective professors, R. S. Aitken and D. E. Denny Brown, who will be mentioned later. To this Department, the family of the late Dr. Scott, through his daughter, Miss Marion Scott, gave £100 to found a Gold Medal to be awarded every year to the best student of the subject.

Meantime, Dr. Drennan, commenting on the work in his laboratory, asked for the help of Dr. Grace Stevenson and also for four student-demonstrators. He noted that C. S. Hicks (before mentioned) and P. P. Lynch were undertaking chemical pathology for the Hospital and remarked that "chemical examinations are essential in any modern laboratory department associated with the clinical work of a hospital, especially on the medical side." This was the beginning of the study of "gastric analysis," which later became important in the treatment of peptic ulceration.

The salaries of the Professors of Pathology and of Bacteriology were raised by £100 a year as "professional men"; the University Council was not pleased with the implied distinction, but accepted it. The salary of the Professor of Anatomy was also raised by £100 a year.

At this time there were eight Bursars, or "Dominion Scholars," living in the Hospital. The Hospital Board, however, was required by law to give a day's holiday every week to the nurses, and had to increase its staff, the bursars' quarters were therefore requisitioned, and the bursars were turned out. It was suggested that they might occupy one of the houses standing on the land bought for the new School, and known as "Meenan's," rent-free, and this was ultimately done. At the end of the year the Government stopped the bursary scheme, but the students were sufficiently impressed with the value of the experience to offer to occupy the building and to pay the Hospital Board 25/- a week for meals in the Hospital. This was agreed to, and sixteen students applied for these positions of whom eight were selected. Two lady bursars were accommodated in the Hospital.

Arising out of the quite reasonable demand for payment by the clinical teachers, the University Council asked that members of the Medical School staff should be put on the Hospital staff. The Board asked what duties were expected of the members of their staff who were not on the staff of the Medical School, and what was their status if they were employed in teaching. The Faculty of Medicine asked the Council for university status for non-university members of the staff, to indicate that they were their colleagues. The University Council resolved to appoint the physicians and surgeons on the honorary staff of Dunedin Hospital as Lecturers on Clinical Medicine and Surgery, and to appoint the assistant physicians and surgeons as Assistant Lecturers.

During this year the Hospital Board agreed to confer with the University Council in making appointments to its staff, which had an important development in later years.

A committee sat on the subject of the remuneration of members of the staff, and it was agreed to raise their payment from fees to £100 a year from the staff fund. This did not apply to Professors.

Dr. Carmalt Jones proposed the issue of an annual volume of "Proceedings of the University of Otago Medical School," to con-

sist of reprints of papers published by the staff and others. The University Council was asked to grant £100 for the issue of these Proceedings which it declined to do. The staff subscribed £40, and the Council paid the balance of the expense involved, but indicated that this was not to be considered a precedent. The first number was issued in 1922. Dr. Barnett enquired if his fund could be used to assist this publication, and the Council agreed that it could; all further issues of the Proceedings were paid for by grants from this fund. The Proceedings became an annual issue, limited to 100 copies. Each number consisted merely of reprints bound together in boards; most of the papers were first published in the *New Zealand Medical Journal*, which is approximately of foolscap 8vo size, and the editors of the *B.M.J.* and *The Lancet* were always willing to supply reprints on paper of the required measurement. Some papers were published in the larger journals, generally on paper of approximately quarto size, and occasionally a number of the Proceedings was issued made up of such papers. It has been convenient to have all the work originating from the School thus accessible, and a very useful collection has been made of the work done on the chief objects of research there studied, more especially goitre and hydatid disease. The Proceedings were sent to a number of British and American medical schools, and to such institutions as that of Scientific and Industrial Research, which asked for an exchange of publications.

It had become apparent that the clinical lectureship that Dr. Bowie had resigned was an unsatisfactory one, and the two Professors of Medicine and the Sub-dean suggested the appointment as Medical Tutor of a junior man who had recently completed his house appointments; such a post was established in many London hospitals. For some reason this proposal raised a storm of protest; it was hotly opposed in the University Council and was referred back to the Faculty of Medicine. After considerable discussion, the Faculty recommended that the experiment should be tried for a year, subject to the approval of the Hospital Board, which was given. The post was not easy to fill, there were no unemployed post-graduates about the place, as is the case in Great Britain, and it was at last taken by Dr. T. L. Parr, an Australian, whose interests were chiefly surgical. The selection was made without any reference to the professors concerned, and this provoked a strongly worded protest from one of them. The Council undertook to consult them in future appointments, and affirmed that the Professor of Systematic Medicine was head of the Department.

As stated above, suspicion had arisen that laboratory work was being overdone in the School, and in a similar way it was felt that there was too much systematic and too little clinical teaching, also that the supply of clinical material was insufficient (as was contended frequently by the Auckland authorities). The Dean made a confidential report on the subject to the Council: it appeared that ample time was allowed for clinical work, but that there was a paucity of cases, particularly medical ones. It was arranged that

the three non-professorial physicians, Drs. Marshall Macdonald, Ernest Williams and Stuart Moore, should each give three clinical lectures a term, at a fee of three guineas per lecture.

The clinical lecture-room at the Hospital had certain imperfections, and the Hospital Board consented to build two others, to the cost of which the staff subscribed; in practice these were very little used for the purpose intended; one of them was turned into a plaster-room, and the other was used chiefly for genito-urinary investigations. The rooms cost £1,000 to which the Hospital staff contributed £400 in war bonds.

Since the Plunket Society was established, the claim was often made that the infant mortality in New Zealand was the lowest in the world (New Zealanders are fond of such superlatives). However, the maternal mortality was found to be disturbingly high, and during this year, 1921, the Chief Health Officer drew the attention of the Board of Health to the matter. He advocated improved training in midwifery at the Medical School, and expressed the opinion that there should be a professor of the subject, rather than a mere lecturer. This was brought before the University Council, which found itself unable to establish a Chair owing to lack of funds, and the matter had to stand over.

Dr. Truby King resigned the lectureship in Mental Diseases; he advocated giving up the lectures on the subject and substituting a week of clinical study at Seacliff Mental Hospital, with demonstrations by the Medical Superintendent. Dr. McKillop accepted the appointment of lecturer in these duties for £50 a year.

During 1921 the Honorary Staff of the Hospital consisted of:—Physicians, Drs. F. Fitchett, Carmalt Jones, Marshall Macdonald, and S. A. Moore; Assistant Physicians, Drs. R. I. Ritchie, C. S. Murray, and K. A. Ross; Surgeons, Drs. L. E. Barnett, F. S. Batchelor, E. J. O'Neill, and W. Newlands; Assistant Surgeons, Drs. T. Fergus, W. E. Carswell, J. Renfrew White, and E. H. Lindon; Gynæcologist, Dr. F. R. Riley; Assistant, Dr. C. North; Ophthalmic Surgeon and Assistants, Drs. H. L. Ferguson, A. J. Hall, Winifred Bathgate; Physician for Children, Dr. E. H. Williams; Stomatologist, Dr. H. P. Pickerill; Dental Surgeon, Dr. C. H. Tait.

Dr. Ferguson was re-elected to the Senate as the Otago University Council representative.

At the end of the year the School sustained a great loss in the death of Dr. Sydney Champtaloup. In the minute recording his death the Council recognized him as "a most capable organizer, and as a teacher and researcher full of enthusiasm, never sparing himself where the interests of the Medical School were concerned. He was also distinguished by great charm of manner." In the Professorial Board minutes Dr. Drennan remarked on Champtaloup's services to New Zealand in his work on cerebro-spinal meningitis during the war, which had saved many lives.

The appointment of Professor of Bacteriology and Public Health had thus fallen vacant, and the Chancellor invited the Dean to bring two members of his staff to a meeting of the Medical and Finance Committee to discuss how it should be filled. It was decided to advertise the appointment throughout Australia and New Zealand, the duties to be the same as those of Dr. Champaloup and the salary £1,000 a year. Five candidates applied, including Dr. Hercus, but another was selected. It appeared, however, that the latter had no specific qualification in Public Health, a subject essential to the Chair, and, on the motion of Dr. Benham, Professor of Biology, the appointment was rescinded and Hercus was elected. It is worth noting that the fourth year medical students, who had been his pupils, sent to the Council a resolution in favour of the election of Hercus.

The rescision made an unpleasant episode, which was symptomatic of the division existing in the University Council. There was a good deal of ill-feeling, and a considerable tilt was made at the teaching of Public Health, "of which we heard so much," and an enquiry was called for on the subject. It was contended that the late professor had done no work in the teaching of it except instruction in Bacteriology, and that all the rest had been done by the Medical Officer of Health, at the request of the Council and with the Government's permission; if this were so, the first candidate selected could have filled the appointment. The Dean affirmed that the teaching was equivalent to that given in England for the D.P.H. The Faculty of Medicine was to report after receiving a report from Dr. Hercus on the teaching of Public Health, or, as it is now called, Preventive Medicine, for the M.B. degree and also for the Diploma in Public Health.

This report, when it arrived, was a spirited document. Hercus noted the increase in scope of the subject since the syllabus was drawn up. At that time environmental factors alone had been considered; there were now included both individual and social hygiene; not only infectious diseases, but the causes, conditions, and early signs of all morbid processes. He quoted Sir George Newman on "the healthy and well-nourished human body; its life-history, heredity, personal habits, rest, occupation, home, and workshop; an individual as well as a member of the community." This involved the study of genetics, heredity, mental hygiene, including the feeble-minded, and of infant and child welfare. All this directly concerned the duties of the general practitioner, quite apart from the special work of the M.O.H., and required the study of Maternity, Infant and Child Welfare, School Hygiene, Dietetics, Water Supply, Epidemiology, Prevention of Disease, Industrial Hygiene, Sanitary Law, Vital Statistics, and sociological problems.

Hercus reported further that the D.P.H. might be taken two years after qualification, and the course had been laid down. Physiological Chemistry was to be elaborated in the new buildings, and Physiology was to be applied to Medicine as Anatomy was applied to Surgery.

(This ultimately took shape in a weekly demonstration by the Professor of Physiology to the students doing clinical work.)

During 1922 the expenditure of £20 was sanctioned for extra instruction in Public Health, and fees were paid to Dr. Lyth, Dr. Williams, Mr. Renfrew White, and Dr. Moore for lectures on the Control of Tuberculosis, Child Welfare, Physical Education, and Mental Health.

Drs. Drennan and Hercus noted the increase of work in their departments, with corresponding increase in the fees earned, and they advised the appointment of a Clinical Pathologist, at a salary up to £500 a year. P. P. Lynch was appointed, at £300.

Mr. Frederick Wood-Jones, F.R.S., the Professor at Adelaide, examined in Anatomy, and Dr. J. B. Cleland, also of Adelaide, was appointed external examiner in Pathology and Bacteriology.

C. R. Burns became assistant to Dr. Drennan in place of Grace Stevenson, and was succeeded a year later by C. S. Hicks.

Arthur Espie Porritt was elected to the Rhodes Scholarship, and was the first New Zealand medical student to hold it. Mr. Porritt was a very distinguished athlete. He had been captain of the Otago University team and ran for Oxford against Cambridge from 1923 to 1926. He was President of the Oxford University Athletic Club in 1925-6, and held the following records:—Otago University 100 Yards (9 9-10 sec.) and 220 Yards Hurdles; 220 Yards, Oxford and Cambridge v. Yale and Harvard (21 3-5 sec.); 100 Yards in Oxford v. Cambridge sports. He ran in the final of the 100 Metres at the Olympic Games in 1924 at Paris, and was captain of the New Zealand Olympic teams in 1924 and 1928.

He entered at St. Mary's Hospital, London, for his clinical work, where he was followed by two other New Zealand Rhodes Scholars, who likewise were both eminent in athletics. Porritt qualified in Medicine at Oxford, and later took the degree of M.Ch. and the diploma of F.R.C.S. (Eng.). His further career is noted below.

In the matter of athletics at Otago, the University had no playing field of its own, which seemed strange to an immigrant Englishman, but in New Zealand all grounds are in the control of semi-public bodies, such as the Rugby Union, which arranges where all matches shall be played. However, the Harbour Board decided to reclaim an area known as Lake Logan for an exhibition site, which it was felt would greatly increase the area of playing fields available in Dunedin. The Students' Association saw the chance to secure part of this land for the University, and a committee of staff and students was appointed to negotiate. Dr. Barnett became a very generous contributor to the expenses ultimately incurred.

During 1922 the financial depression throughout New Zealand had become very serious. A Public Expenditure Adjustment Act was passed, the Government grant to the University from the Consolidated Fund was reduced by £2,000, and the professors' salaries were cut down, which was naturally much resented. It was hardly a favourable

time to approach the Government for large sums of money, but a deputation waited upon the Prime Minister to ask for £51,000 for the shell of the new building.

Mr. Massey was very strongly pressed to grant this money, on the grounds that the General Medical Council had passed regulations that Anatomy and Physiology were to be carried on throughout the medical course. More room was required for this, and at present it was impossible to comply with the regulations. If this continued the New Zealand qualification would not be registrable in Great Britain.

Mr. Massey made the proviso that there should be no more requests for money for the next twelve months, to which the Chancellor replied "not unless absolutely necessary." The University Treasurer contended that the "cut" had been excessive, and that it had been made as if the Government paid for the whole of the University, whereas in fact it gave only half the income.

During this year Mr. Anscombe, the architect, while visiting America, took the rather unusual course of independently approaching the Rockefeller Foundation for funds for the building, but without result.

Dr. Carmalt Jones was appointed Honorary Librarian to the Medical School, and was made a member of the University Library Committee. He asked for medical books at a cost of about £40, which were granted, but he was advised that on account of the straitened finance only an annual application would be considered.

A few modifications were introduced in clinical medicine. It was arranged that the staff should attend in the afternoons so as to leave the wards free for students and house physicians during the mornings. Dr. Parr's year as Medical Tutor came to an end, and he did not seek reappointment. The students were sensible of the value of a tutor, and Dr. Carmalt Jones had no intention of allowing the appointment to lapse. It was, however, a difficult one to fill; it was advertised, but with no response, and one good candidate from England who was visiting the country decided to return home and withdrew his name. The opposition party in the Council, which had always obstructed and derided the whole idea, wished to have the work done by practitioners in the city and by the assistants in the laboratories, with which the head of the department would have nothing to do. Dr. Carmalt Jones proposed to select a junior tutor from the residents, and since the salary was unpaid in the absence of a tutor £150 was voted for this purpose, and £100 was paid to Dr. Carmalt Jones for additional work done by him. He also obtained leave to make personal enquiries at other medical schools, and from Sydney he got strong recommendations of Dr. Douglas Radcliffe, M.B., Ch.M., Sydney, by Dr. A. E. Mills, Professor of Medicine, Dr. (afterwards Sir) Charles Bickerton Blackburn, and Dr. Priestley. Dr. Radcliffe came, and stayed two years, and established the very great value of this post. He later went into practice at Balclutha, in South Otago, where he took charge of the hospital, the foundation

of which had been so much opposed in Dunedin. This led to his adoption of surgery, and he ultimately became the best qualified man in New Zealand, holding the M.R.C.P. (Lond.), F.R.C.S. (Eng.), and M.Ch. (Melbourne).

During 1922 Drs. Newlands, O'Neill, and Batchelor were all absent from Dunedin on leave, and Mr. J. A. Jenkins was appointed a third surgical tutor. Dr. Charles North was offered and accepted the tutorship in Gynæcology, and Dr. Riley agreed to the not very generous course of deducting the tutor's salary from his fees, "as a temporary measure." Naturally, during this year such applications as were made for increases in salary were refused.

A degree of Master in Surgery (Ch.M.) was established, and an examination syllabus was drawn up for it. Candidates must be qualified M.B., Ch.B., and after qualification must have held surgical appointments for at least two years in hospitals of at least 200 beds. Mr. J. Renfrew White was the first to take the degree, which he did during this year.

A "Christie" prize and medal for Applied Anatomy were founded by the widow of Dr. W. L. Christie, the first Otago graduate in medicine. The first Christie medal was won by Dr. G. R. Kingston, afterwards of Timaru, South Canterbury. The New Zealand Medical Graduates Association gave junior and senior prizes for Clinical Medicine and Surgery, and also presented the School with portraits of Dr. Scott and Dr. Roberts.

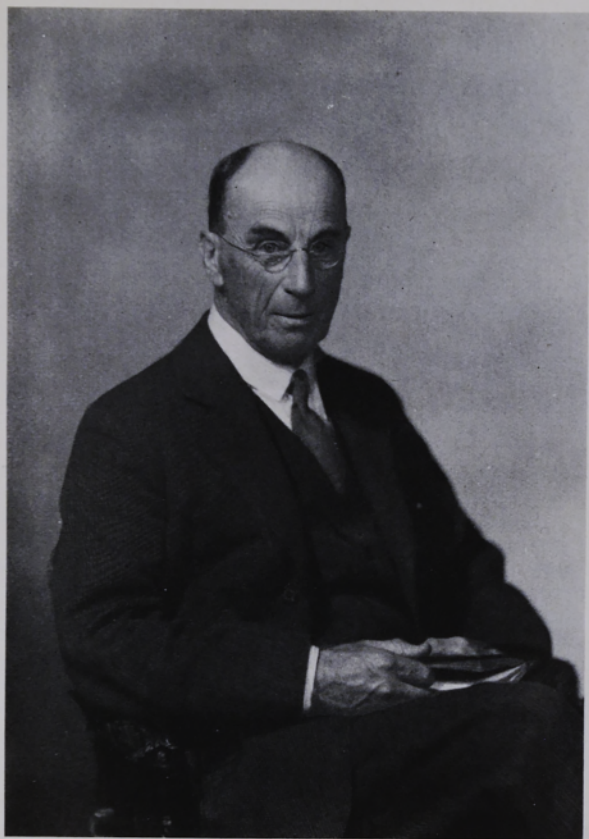
The Middlesex Hospital, London, gave a New Zealand Scholarship, which was preferably to be awarded to the Travelling Scholar of the year. This was a modification of that established in 1909.

In this year the question was raised of establishing a degree of Bachelor of Medical Science, which was done a few years later.

Sir James Allen, then High Commissioner in London, reported that he had assisted a Dr. Monson, when a candidate for the F.R.C.S. (Edin.). On that occasion there were 72 candidates, of whom 18 passed, including three out of four New Zealanders who entered. Dr. Monson had passed "first" in Gynæcology, and he was complimented on his paper as "one of the best that was ever handed in." Sir James also reported the good offices of Lady Frances Ryder in London, who obtained valuable introductions for New Zealanders (besides other colonials), including the young doctors.

The Lake Logan playing area was further considered, and at this time 20 acres were leased to the University by the Harbour Board at a rent of £100 a year for 50 years, after which it was to be increased to £200. Dr. Barnett pressed for an adequate scheme for the University sports ground.

The O.T.C. had been disbanded, and the future use of the Marama Hall was discussed. General McGavin, head of the New Zealand Army Medical Service, offered to transfer the South Island Medical Depot from Christchurch to Dunedin in order to use this building. There were to be 250 men (150 students and 100 others),



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but objections were raised to persons other than students making use of University premises. Nothing came of the suggestion.

A sign of movement with the times was a proposal to appoint a Hospital dietitian, who should lecture to Home Science students and so relieve the Home Science professors, and should also help to improve the Hospital diets. The Hospital Board was to pay half the salary. This post was later established.

There is some odd correspondence over the difficulties of a single Seventh Day Adventist student, who was prohibited by his religion from attending classes or sitting examinations on Saturdays. Some compromise was arrived at. It strikes one as improbable that any Christian student who found it convenient to attend a Jewish educational institution would be able to get much consideration for his observance of Sunday.

Dr. McKillop came from Seacliff into Dunedin every week to see cases in the Hospital, at a considerable cost to him in petrol and tyres, for which his £50 a year was poor remuneration. He also found it necessary to double-bank his classes at the Mental Hospital.

Dr. Charles Burns was awarded the Travelling Scholarship and also the Batchelor Medal. Dr. Burns was perhaps the first graduate to practise exclusively and successfully in New Zealand as a "pure physician." He took the London M.R.C.P. and returned to Dunedin as Medical Tutor, which post was combined with that of Resident Medical Officer during his tenure, with a very striking improvement in the treatment of patients, owing to the supervision exercised over the residents. Later he went into practice in the city, and in time returned to London, where he relieved Dr. R. S. Aitken in the Medical Unit at the London Hospital, then on study leave, an exceptional opportunity for an overseas visitor to London. On coming back to New Zealand he held a short-lived appointment in medicine at the Auckland Hospital, and then resumed medical practice in Wellington, as a keen and progressive physician and medical reformer. At a date after the period with which this book deals he was elected F.R.C.P. (Lond.).

In 1922 the only change in the Hospital Staff was the replacement of Dr. K. Ross as Assistant Physician by Dr. A. S. Moody.

The first meeting of the Australasian Medical Congress, B.M.A., was to be held in Melbourne in 1923, and Dr. (afterwards Sir) George Syme, the President, asked the Chancellor of the University of New Zealand to grant leave to the members of the staff to attend; leave was granted. Dr. Marshall Macdonald was elected President of the Section of Medicine and a Vice-president of the Congress. The Australians were evidently very pleased to see the New Zealanders at this newly-planned meeting, and it was indicated that an invitation to hold the next congress in New Zealand would be well received. The invitation was offered and accepted. The meeting was arranged to be held in Dunedin in 1927. Dr. Barnett was elected president, Dr. W. P. Gowland was honorary general secretary, Dr. A. M. Drennan

honorary assistant secretary, and Dr. Carmalt Jones honorary treasurer. These formed the Executive Committee. The University Council granted the use of the Medical School buildings, including the new ones, for the congress.

Throughout 1923 there was a continual struggle with a parsimonious Government to obtain the funds needed for the new buildings. Mr. Massey appeared even to have understood that the request for the money needed to put up the shell had been withdrawn. One can imagine Dr. Ferguson's registration of surprise. He reiterated his statement to the Prime Minister that "if the School was to continue, the teaching must be up to the English standard"; that was to say, it must have the required accommodation, or the students must go Home. It was not till September that £20,000 was paid over on account of the new buildings—a quite inadequate sum, since it was necessary to call for tenders to complete the shell, which was to cost about £50,000. There is a note in the correspondence to the effect that a New Zealand and South Seas Exhibition was shortly to be held in Dunedin, which would absorb much labour and so add to the difficulties in getting the School building completed.

A more or less revised estimate by Mr. Anscombe of the cost was as follows:—The shell, £51,000; interior finishing, heat, and light, £25,000; fittings, £8,000; floor covering and furniture, £2,000; total, with other matters, £86,000. The Education Department objected to this cost, and said that £75,000 was the maximum which could be granted. Dr. D. S. Wylie, of Palmerston North, and Sir Donald McGavin, of Wellington, came to inspect the School, and on observing the congestion they were convinced of the need for more buildings, and laid particular stress on the report of the Education Committee of the General Medical Council, which insisted on the carrying on of the subjects studied at the beginning through the final years of the course. This was, in their opinion, "the most important suggestion made by the sub-committee"; at present subjects were only learnt by cramming, and dismissed from the mind as soon as the necessary examinations were passed.

After all this a reluctant grant of £75,000 was made, together with a further £7,000 or £8,000 for equipment, and tenders were to be called for the shell; that of Mr. McLellan, for £56,000, was accepted. The houses in King Street had, of course, to be evacuated by their tenants.

One cannot but admire Dr. Ferguson's handling of the whole situation. He often spoke of his labours and his difficulties in "educating" Ministers of Education, one after the other. One follows with delight his successive requests, first for the site. It is of the utmost importance to secure the site, otherwise a gasworks is sure to be built upon it. The site, yes; but what is the good of a site? Let us have the shell; we ask for no more than the shell. But, after all, a shell must deteriorate rapidly unless the building is completed. And a completed building, eating its head off, so to speak, without equip-

ment. One sees the victim, as in Leech's old *Punch* picture, at last saying wearily, "Oh, give us the pen."

Years later, at the opening of the buildings by the Hon. William Downie Stewart, that gentleman, an old Minister of Finance, recalled interviews with Dr. Ferguson, who came to put forward a demand for, say, £10,000. "£10,000! It is out of the question! Do you suppose no one else wants money? The whole thing is preposterous. You had £15,000 the other day on the *distinct understanding* that there would be no further grants for five years." And so on and so forth. As soon as the first transports of the Minister had subsided Dr Ferguson would continue: "With regard to Physiology—"

Naturally, the other centres were not overjoyed at this large expenditure on behalf of Otago. There is a letter from Mr. Parr on the hardships of the North Island in the matter of special schools, and an intimation that "part of the course" in medicine should be taken at other hospitals. Auckland, in particular, insisted on the monopoly enjoyed by Otago, and on the defective opportunities in clinical work available in Dunedin. The Hon. George Fowlds, of Auckland, called for a return of the homes of those attending special schools at Otago, in the belief that they would nearly all turn out to be in the neighbourhood of Dunedin. However, it turned out that two-thirds came from elsewhere.

With reform in the air, the appointment of a Royal Commission was suggested to enquire into the working of the existing university system in New Zealand. This was opposed by Otago, and if it were set up Otago was greatly concerned about the terms of reference. In particular, Otago was opposed to the establishment of four separate universities, or at least a separate one for Auckland, as had been suggested. Otago held that all the necessary reforms could be carried out within the existing University of New Zealand.

The actual position of the Medical School cannot be better stated than it is in the following extract from a letter from Dr. Ferguson to Dr. Allen Gregg, of the Rockefeller Foundation:—

3. The third point in your schedule is Organization and Control. The School was started by the young University in its earliest days with no endowment except a reserve of 10,000 acres of pastoral land set aside by the Provincial Government, and the cost of the School was £600 a year for a Professor of Anatomy and Physiology and a dissecting room porter. Probably £1,000 or £1,200 a year covered the outgoings. The balance beyond the rent of the endowment came out of the University funds, and the control was in the hands of the University Council, at that time a body nominated by the Provincial Council. The constitution of the University Council has been changed from time to time, but the control of its schools—Medical, Dental, Mining, Home Science, Law—all remain in its hands. The Government has been approached on various occasions for funds, and has to be convinced that they are required, and the Minister of Education is furnished with annual reports as to results, but the administration of these moneys is in the hands of the Council of the Otago University, or in the other centres of the councils of their respective colleges. The Council at present consists of four representatives of the graduates, three Government nominees,

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two representatives of the Professorial Board, one representative of the City Council, one of the primary school teachers, one of the secondary school teachers, one of the High School Board of Governors, one of the Education Board (which controls the primary schools and is an elective body), one of the Hospital Board, one representing the Country Schools Boards, one representing Primary School Committees. The School Committees represented are elected for each school by the parents whose children attend the schools, and their function is to control the affairs of their particular schools. The Education Board is elected by the School Committees. The Hospital Board and City Council are elected by poll of the ratepayers, whose primary interest is to keep the rates down, and the High School Board of Governors consists of representatives of the Education Board, University, City Council, and parents of pupils. The result of this democratic system is that only about half of the Council are men holding university degrees or having any personal experience of university life. This no doubt militates against a too academic view of university work, but at times makes it difficult to obtain expenditure on lines that seem more urgent to university teachers than to representatives of elective bodies.

The system on the whole does not work so badly, as, being obviously unable to judge for themselves, the Council has usually to accept the guidance of the minority who represent the teachers, and we are fortunate in our Chancellor, who is a man of wide sympathies, with a broad educational outlook.

The Professorial Board, recognizing the importance of the Medical School, has always chosen one of its two representatives on the Council from the Medical Faculty.

The direct control of the School is in the hands of the Medical Faculty, which had become rather unwieldy and has recently been reconstituted. All the professors and heads of departments in any subject taught in the medical curriculum are members of the faculty. Each subject, such as Medicine and Surgery, or groups of minor subjects, such as Eye, Ear, Nose, and Throat, Children, Anæsthetics, Orthopædics, Venereal Disease, etc., has an advisory committee consisting of all the teachers, senior and junior, in each subject or group of subjects, and each committee is to elect one of its members—a lecturer or assistant—for each four or fraction of four members of the committee to be a member of the faculty. Any question thus of teaching in, say, Surgery, will be considered by the Surgical Committee, consisting of the Professor of Surgery, the Lecturer on Surgery, the Surgical Tutors, the Clinical Lecturers, and the Assistant Surgeons. Their recommendations will come before the faculty, supported by the professor and the elected representatives of the rest of the committee. The faculty elects its Dean, who is appointed by the Council. The faculty reports direct to the Council, except where the interests of other faculties are involved. An alteration of time-table in the Science subjects would affect the Science, Home Science, and Dental Faculties, and would have to be referred to them and pass through the Professorial Board on its way to the Council. A matter involving Medicine or Surgery would go direct.

4. The University has certain endowments and Government grants.

5. The Medical School budget is also set out in schedule. When I became Dean the School budget was about £9,000. Last year it was about £17,000, and if I had twice that amount I could spend it to immediate advantage in paying my staff adequately, in providing much-needed assistants, in developing research work, and establishing a library. I am particularly anxious to establish a service of assistants to whom one could hold out a prospect of increasing salaries, leading to positions as lecturers and assistant professors so that we can hold promising men. As it is, the assistant in Physiology has just been taken by the Christ-

church Hospital Board to do Bio-chemistry at £200 a year more than we could give him, and my Bio-chemist is going Home to take up a Beit Scholarship.

6. The Anatomy and Physiology departmental buildings are old, but have been enlarged and were adequate for small classes, except for the fact that they were over half a mile from the Hospital and the rest of the Medical School. I have for five years been trying to get them moved to the immediate neighbourhood of the Hospital in order to correlate the teaching of Anatomy and Physiology with the teaching of the later subjects of the curriculum, and the Government has at last voted a sum on account of the new buildings alongside the Pathological and Bacteriological block and immediately facing the Hospital. I hope to get tenders called for this new block almost immediately, and look forward to a great development in our Bio-chemistry teaching as soon as they are complete. This new building will house Anatomy and Histology on the top floor, Bio-chemistry and Chemical Physiology on the middle floor, and Experimental Physiology and Pharmacology on the ground floor. There are rooms allocated on the plans to the Professors of Medicine and Surgery, but in time these will be housed in another adjoining block for the final year subjects and library. The rooms thus allocated in the Anatomy block will probably later be used for research.

7. The laboratory accommodation in Pathology and Bacteriology is good, and of the proposed accommodation for Anatomy and Physiology you will be able to judge from the plans. The buildings are designed for classes of 50 students, and the extra space in Anatomy and Physiology is necessary, as these are two-year courses; there will always be two concurrent classes in them, and provision has to be made for Dental and Massage students, and in Physiology for Home Science students.

Within the last ten years the laboratory and practical teaching has been very much developed, and the tendency is to restrict didactic instruction in favour of practical work. To indicate this change I may say that the Professor of Public Health gave his class of 60 students this year the option of a class examination at the end of the year or a piece of research work. All but two of the class chose the research, and, working in pairs under the direction of the professor, carried out during the year researches on such diverse subjects as Housing, Water Supply, Milk Supply, Goitre, Hydatids, Tonsils and Adenoids, Healthy Teeth, the Influenza Epidemic in an Institution, Gonococcal Blood Tests, Buccal Cancer, etc. The spirit of enthusiasm for research was admirable, and I much doubt if ten years ago we could have got a pair of students to have voluntarily scoured the city and suburbs to collect dogs' fæces to determine the regional prevalence of tape worm. Personally, I am afraid I should not have the assurance to invade hundreds of houses and demand to see the conditions of life of the adenoid children, or enquire into the diet of children whose teeth were good, but at all events they have learnt to brave the house dog and interview the householder, collecting in the process much interesting material and obtaining an insight into the systematic investigation of Public Health problems.

8. The clinical teaching is carried on in the Dunedin Hospital by the Honorary Staff, who have the title of Clinical Lecturers in the University. The staff is appointed by the Hospital Board, but recently the Council of the University has been consulted about the appointments, a joint committee of Council and Board considering the names and recommending the Board as to those to be appointed. The Hospital Board is elected biennially by the ratepayers, and has complete control of the Hospital. The University Council and the Honorary Staff each send one representative to the committee of the Board, but at full Board meetings they are not represented, and the recommendations of the

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committee are at times reversed. This system of dual control of the School is most unsatisfactory in principle and affects us chiefly in the matter of expenditure for teaching purposes, which the Board will not place on the ratepayers, while the Council, if it had the money, has no power to spend it on the premises of another public body.

The Hospital contains 306 beds, the infirmary ward at the Old People's Home 50 beds, the Prince Edward Hospital Annexe for Orthopædics, etc., 28 beds, the Sanatorium at Palmerston 54 beds for early phthisis, and that at Wakari, two miles from town, 52 beds for advanced cases. These two will probably be combined at Wakari, where the buildings are complete, but for various reasons the Board has postponed the abandonment of the Palmerston Sanatorium, which must sooner or later be faced.

The Infectious Diseases Hospital contains 20 beds. It will have to be replaced on another site, but questions of expense have caused the Board to delay this necessary change.

An intensive course of about ten days is given at the Seacliff Mental Hospital, about 25 miles from Dunedin. It has some 700 patients, and is under Government control.

Midwifery is taught at the Forth Street Hospital, containing 16 beds, under the Hospital Board's control, at St. Helens Hospital, 16 beds, under the control of the Health Department, and at the Salvation Army Home. The total number of deliveries in these hospitals is insufficient for our large classes, and is supplemented by outside cases, and during the vacation by cases in the St. Helens Hospitals in the other centres.

9. Ten years ago our library consisted of 700 volumes, of which only 35 had been published since 1900. Since then we have had numerous additions, the result of appeals to the profession. We have now some 3,000 volumes, but we have no specified allowance for the purchase of books, and have to requisition for whatever we see notices of which is likely to be of value to us. The amount spent on all departments in the Medical School for library purposes last year was £291. The Departments of Anatomy and Physiology have special libraries in their departments. The Anatomical library is good, and the Physiological library is fairly good. The professors have the journals they think requisite.

The journal side of the general medical and surgical library was non-existent ten years ago, and even now is largely maintained by the personal contribution of members of the staff.

There is also a small students' library, containing 500 or 600 volumes and a few current periodicals. The students have access to the staff and department libraries for special purposes.

11. Candidates for admission to the School must be 17 years of age and have passed the Medical Preliminary Examination, which means they must have passed the Matriculation or University Entrance Examination in English, Latin, Mathematics, Greek, or a foreign European language, History, Chemistry, and one other subject.

13. The total number of students in the School at present is 357. The numbers in the entering class rose from about 25 ten years ago to a maximum of nearly 100, but the pendulum has swung back, and the last entering class was 42, with probably another 10 or 12 who are taking their Chemistry, Physics, and Biology in the other centres and will come on here for their Anatomy next March. We consider the classes will settle down at about 50, which, with the new six-year curriculum, will give a School of about 300 students.

16. The students come from all parts of New Zealand, and occasionally from outside. These latter generally have New Zealand ties to bring them. I have at present in my class a student who entered the

School many years back, but took no professional examination. After 20 years in the States he has returned to take up his course again.

17. More than one-third of the medical men on the working register in New Zealand are our graduates—297 out of 870. A few are in practice in Great Britain, two or three in Canada and the States, some have gone to India and China on missionary work, some to the Islands. Most of them go to Britain to see British work, and many take further qualifications there, a good many the fellowship of one of the Colleges of Surgeons. Most of these come back and settle in New Zealand.

A considerable proportion of our women graduates have been absorbed by the Education Department as medical inspectors of schools, but some of them have entered into general practice, with marked success.

Practically all our young graduates obtain positions as house surgeons in the various hospitals of the Dominion, which depend on the School for the supply of their junior staff.

18. The standing of Dunedin as a medical centre in New Zealand has been high for the past forty years, and the presence of the School has undoubtedly played an important part in establishing and maintaining a high standard of professional work.

The New Zealand Government has recently definitely recognized this Medical School as being the National Medical School for the Dominion, and has just committed itself to the expenditure for the erection of the new Anatomical and Physiological Departments.

19. The list of publications of the staff is, unfortunately, a brief one, but this must not be taken to indicate that the staff are not alive. During the last five years they have been working at very high pressure in consequence partly of the absence of a suitable assistant staff, and also because of the large size of the classes, which has taxed their energies to the utmost and necessarily cut down the time which they could devote to research or original work. The School has published a small volume of Proceedings, being a collection of work done by members of the staff and graduates, and the second volume is now in the course of production. The first volume would have been larger had it not been for lack of funds, and the second volume will also probably not be an ambitious one for the same reason. We are in hopes, however, that they are only the forerunners of a series which will increase in importance as time goes on.

The history of the School, then, may be summed up briefly as one of slow growth for thirty years in the face of immense difficulties from want of funds, then of steady increase for ten years, with still inadequate funds. During the last ten years very rapid growth of the classes, with great improvement in the teaching facilities, and a great, though not adequate, expansion in the budget. Recent increases in expenditure have had to be met by increasing the students' fees, and last year there was a balance of over £1,100 transferred from the Medical School account to the general funds of the University. This is the first time this has happened. The previous year the balance was some £3,500 the other way, and the Council is very chary about facing any increased expenditure, which may lead to a recurrence of the long series of annual deficits.

During the nearly ten years I have been Dean my constant struggle has been to get money. I succeeded in getting the whole-time salaries up to £900, and then the Professors in Arts tackled the Council to raise theirs to an equal footing and blocked any further advance. After two years' work I persuaded the Government to raise them to £1,000, and then the Government had to retrench and cut down the grants, thus bringing the salaries back to £937. I have secured assistants for the various departments now, but have no satisfactory prospects of holding them, as we cannot promise a career to them after two or three years'

UNIVERSITY OF OTAGO MEDICAL SCHOOL

work. Our salaries are lower than those in Australia, and superannuation is provided by deductions from the salaries. In Australia superannuation is paid for by the universities, and no deduction is made from the teacher's salary for this purpose. I am consequently always on tenterhooks that my whole-time men should be taken by a tempting offer elsewhere, and one of the things that has given me the greatest satisfaction in my tenure of office has been the loyalty to the School which has on four occasions led to refusals of such inducements by men I could have ill spared.

We have induced the Government to accept the School as a national asset, which recognition involves the acceptance of a national liability, and it will lie with my successors to keep them up to the mark. So far as buildings are concerned, they are now committed to the new Anatomy and Physiology block. Later we shall have to get them committed to a Public Health block and a building for the final year subjects and library. Research will for some years to come have to be carried on in the department laboratories, but I trust that in time, while each department is carrying on its own researches, there will be a separate building for medical or clinical research work attached to the final year department.

These forecasts as to future development hardly come within the scope of the questions you wished answered, but I have added them to indicate the lines on which I think the School is likely to move. Every step so far has been the result of inexpressible effort, but we are on our feet and gathering momentum, and the next steps will, I think, be easier than the last have been.

The Medical School library required attention. Dr Carmalt Jones was entirely dissatisfied with his position as librarian, and desired some better arrangement. No one was established in the room to take proper charge, and things were getting into considerable disorder. He suggested to the Faculty of Medicine that a half-time librarian should be appointed to attend in the library from 2 to 5 p.m. on five days a week, the room to be kept locked in the forenoon. This was carried, and as the University could provide no salary, the Hospital Staff voted £25 towards it, which was to carry subsidy. The librarian's mornings were to be occupied with the Hospital records, for which the Board was to pay £50 a year. Dr. S. W. Hogg, a medical man who was not in practice, accepted these appointments, which were the beginnings of efficient library and records services. One of Dr. Hogg's first activities was in making up missing numbers of journals, many of which had gone astray during the war.

In the Anatomy Department Dr. Gowland undertook to teach Histology, which had hitherto been studied as a part of Physiology. Dr. Archibald Durward was appointed a demonstrator of Osteology. He took up Anatomy professionally, and ultimately held the Chair in that subject at Leeds University. In the following year Dr. John Cairney, of the Anatomy Department, was awarded a Rockefeller Fellowship, and spent his time at the University of Chicago, under Professor Herrick, in a study of the brain of the tuatara, the primitive New Zealand lizard.

In Physiology Dr. Milligan resigned his demonstratorship and was succeeded by Dr. Muriel Bell. The latter received a grant from the

Roberts Fund for research in Basal Metabolism, the study of which had recently been undertaken in the clinical investigation of goitre. She published her results in a paper for which she was granted the degree of M.D.

Mrs. S. S. C. Sinclair was appointed assistant to the Professor of Pathology.

Dr. P. D. Cameron resigned the post of Radiologist to the Hospital and was succeeded by Dr. Colin Anderson, an Otago graduate, who was then holding a research scholarship in radiology at Manchester.

In this year another medical man, this time a qualified one, was elected to the Rhodes Scholarship. Dr. Robert Stevenson Aitken, M.B., Ch.B., had been placed first in both Junior and Senior National Scholarship examinations, and second in the Junior University Scholarship. He was Travelling Scholar of his year, and was also awarded the Batchelor Medal. He had been an Otago hockey blue and was captain of the University team. He went up to Balliol College, but after a year or two he resigned the Rhodes Scholarship to enter the Medical Unit at the London Hospital. From there he was ultimately elected to the Regius Chair of Medicine in the University of Aberdeen.

Cedric Stanton Hicks was the first New Zealander to win a Beit Memorial Fellowship. With this he proceeded to Cambridge and joined Trinity College, and worked under Professor Gowland Hopkins, of vitamin fame. He became Assistant Professor and later Professor of Physiology and Pharmacology at the University of Adelaide.

Two commercial firms offered to endow a Chair of Bio-chemistry in the Medical School, but their offer was not accepted. The firms wished to nominate the incumbent, and it was felt to be improper for the University to give a guarantee to any commercial product, which appeared to be what was wanted.

An attempt was made to set up a Diploma in Nursing, to be granted by the University. It was to be a five-year course for matriculated women who wished to take up administrative or specialist positions. The Faculties of Medicine and of Home Science reported favourably upon the suggestion, but nothing came of it except a good deal of controversy and dissatisfaction.

In 1923 Dr. Frank Fitchett was admitted a Member of the Royal College of Physicians of London.

The degree of Bachelor of Medical Science, previously mentioned, was set up in this year in order to encourage medical students to do research. The examination might be taken after the third year in Anatomy or Physiology, or after the fourth year in Pathology or Bacteriology, or at the final examination in a special subject. In Anatomy there might be studies in Embryology, Neurology, Anthropology, or Sectional Anatomy; in Physiology in Experimental Physiology or Chemistry, or Physiology of the Special Senses; in Pathology in Morbid Anatomy or Histology, or Experimental Pathology. The

degree, which requires the postponement of qualification for another year in addition to the statutory six, did not prove very popular, and has rarely been taken. The Senate wished to substitute a diploma for it, but this was successfully resisted.

During 1923 Mr. R. McCallum, solicitor, of Blenheim, presented some £550 to establish a memorial to his daughter, Marjory, who died while a student of medicine at the University.

In this year the Marama Hall was opened by the Governor-General, Admiral of the Fleet the Viscount Jellicoe.

CHAPTER XVI

1920 — 1929 (Continued)

CHAIR OF SURGERY

RESEARCH

EARLY in 1924 Dr. Barnett addressed the following letter to the Dean of the Faculty of Medicine:—

With many regrets I beg to inform you that this year, the sixtieth of my age and the thirty-fourth of my membership of the Honorary Medical Staff of the Dunedin Hospital, is to be the last of my occupancy of the Chair of Surgery.

There are many reasons which have influenced me in coming to this momentous decision, but the chief one is that I feel that I can no longer maintain the heavy strain of surgical study, surgical practice, and surgical teaching at a pitch that I think desirable, indeed, essential, in the holder of so important a Chair. As man and boy, teacher and pupil, I have been connected with Otago Medical School for over forty years, and I do not wish now to sever that connection entirely. I hope to keep and show my interest in surgery until for me the curtain falls. Will you be kind enough therefore to forward this letter to the University Council as an indication that I desire to resign the Professorship of Surgery at the end of this year?

Yours very faithfully,

(Signed) L. E. Barnett.

When this letter came before the University Council that body recorded in a minute its recognition of the high standard of surgery displayed by Otago graduates, due largely to Dr. Barnett. He had held a Junior University Scholarship for two years at Otago and had completed his medical education at Edinburgh, where he had been an extra-mural demonstrator of anatomy. He graduated M.B., C.M., with first-class honours, in 1888, served as house surgeon at the Middlesex Hospital, and took the diploma of F.R.C.S. (Eng.). He returned to Dunedin, and in 1895 became Lecturer on, and in 1909 Professor of, Surgery. In 1907 he was President of the B.M.A., New Zealand Branch, in 1902 President of the Section of Surgery at the Intercolonial Medical Congress, and he was at that time President-elect of the Australasian Medical Congress. He served as lieutenant-colonel and consulting surgeon in the war 1914-1918, and was awarded the C.M.G. Note was made of his work on the Honorary Staff of the Hospital and on the Hospital Board, with special reference to the supply of radium and to the study of hydatid disease.

What Dr. Barnett himself regarded as his most important achievement was in the establishment of the Royal Australasian College of Surgeons, a body assembled with the avowed intention of raising the

standard of surgery in Australia and New Zealand; both of these are countries in which surgery is far more a part of general practice and less of a specialty than it is in England. Dr. Barnett, by then Sir Louis, succeeded Sir George Syme, of Melbourne, the first President, in the Chair. Mr. Gordon Bell was afterwards Vice-President. Dr. Barnett was also Chairman of the Otago and Southland Division of the Cancer Campaign from its foundation. In lighter vein Sir Louis himself wrote what he called "A Minor Reminiscence. In 1885 an aquatic carnival was held on the Dunedin Harbour and the Medical School competed in a four-oar skiff race. The team consisted of J. Johnstone (stroke), Ninian Trotter, L. E. Barnett, and R. V. Fulton, with Dr. J. Macdonald's little boy as cox. We wore scarlet jerseys with white skull and crossbones thereon" (the ordinary University colours are blue and gold) "and we were coached by that excellent oarsman, Dr. W. S. Roberts. The water was rough; we caught a few crabs, and were beaten by the stalwart factory hands of Reid and Gray."

A few weeks later Dr. Barnett was invited to attend the Council to advise on the future of the Chair of Surgery. Meantime an anonymous donation of £8,000, upon which a £ for £ subsidy was later granted by the Government, was made for the endowment of this Chair. The donor was Dr. Barnett himself. He wished to avoid "embarrassing publicity," but some months afterwards he recorded "my intention of showing in tangible form, firstly, my appreciation of the work the Otago University is doing for the community in New Zealand in general, and of this district in particular. Secondly, my affection for and pride in an institution that I have been very closely connected with as student and teacher for over forty years; and, thirdly, my gratitude for the many benefits I owe to this connection." Actually, Dr. Barnett had resolved to make the munificent gift of £10,000 to the University, including £1,000 which already formed the Barnett Fund, £8,000 for the Chair of Surgery, and £1,000 towards the playing field at Lake Logan. The Chair was named after Ralph Barnett, a son of the donor, who was killed in the war while serving with the Lancashire Fusiliers.

The Faculty of Medicine was asked for its views on filling the Chair. The Faculty Executive recommended as follows:—The Professor to be head of the Department of Surgery, and to spend fifteen to twenty hours a week in the Hospital in surgical work. To be Honorary Surgeon to Dunedin Hospital and to have the other surgeons of the honorary surgical staff as his assistants. To teach operative surgery by arrangement with the Professor of Anatomy. To give the statutory lectures (other lectures to be given by arrangement, fifty clinical lectures to be given yearly and to be shared with the rest of the staff). The salary to be £850 a year, without fees (£600 was given), private consulting practice to be allowed.

Dr. Carmalt Jones, on taking up his appointment, had found conditions totally different in Otago from what he had been led to expect

before leaving Home. He therefore pressed that the fullest information about things in New Zealand should be given to intending candidates. This was agreed to, and a very clear account of the conditions of living and of medical practice in these parts was supplied.

The appointment was advertised in *The Lancet*, *British Medical Journal*, *The Times*, *The Scotsman*, *The Medical Journal of Australia*, and *The New Zealand Medical Journal*, and information was supplied to the New Zealand centres and to Sydney and Melbourne. An advisory committee was appointed for candidates from Great Britain, made up of Mr. Charles Choyce, of U.C.H., London (a New Zealander), Sir Harold Stiles, Edinburgh, Sir Berkeley Moynihan, Leeds, Sir W. I. de Courcy Wheeler, Dublin, and Mr. Sampson Handley, Middlesex Hospital, London. There were five candidates in the United Kingdom and six in Australia and New Zealand.

Both the Faculty of Medicine and the Professorial Board were dissatisfied with the arrangements for local candidates, feeling that their applications should receive the same scrutiny from an expert advisory committee as did the applications from Home. The local applications would come to the University Council, on which two or three medical men sat, to each of whom any one of the local candidates might have been well known all his life, so that his application could hardly be regarded without bias, either favourable or the reverse. A deputation waited on the Council and expressed this opinion with some force, but their request for a second advisory committee was refused.

The successful candidate for the Ralph Barnett Chair of Surgery was Francis Gordon Bell, M.D. (Edin.), F.R.C.S. (Eng. and Edin.). He was a New Zealander from Marlborough, and had qualified in Edinburgh, where he acted as house surgeon, and did the same in Liverpool and at Salford. Later he was Tutor and Assistant in Systematic Surgery at Edinburgh, and held the Grierson Bursary, the Vans Dunlop Scholarship, and the Goodsir Memorial Fellowship. He also worked in Berlin and as a Foundation Fellow at the Mayo Clinic. In the war he served for four years in the R.A.M.C., and acted as a surgical specialist at a C.C.S., for which he received the M.C. in 1917.

On Mr. Bell's appointment as Professor, Dr. Barnett was made Professor Emeritus.

On the surgical side Dr. Fergus resigned his tutorship, and was succeeded by Mr. J. A. Jenkins. The latter was also recommended by Dr. Barnett for the post of Assistant Surgeon, to which he was afterwards appointed.

In Midwifery, Dr. Valentine, Chief Health Officer, and Dr. Henry Jellett, then of Christchurch, formerly Master of the Rotunda, Dublin, together advised the erection of a maternity hospital to replace St.

Helens and the Batchelor, which should be maintained by the Health Department and the Hospital Board.

The Minister of Education, the Hon. James Parr, emphasized the suggestion that the sixth year of medical study should be taken elsewhere than in Dunedin. It happened that Dr. Frederick Bevan-Brown, of Christchurch, had persuaded the North Canterbury Hospital Board to admit students to the Hospital, and had also persuaded his colleagues of the staff to teach them; and a few students, at first only those who had failed in the previous final examination, spent some months in Christchurch. From this small beginning an important plan was developed for the sixth year, without which it is difficult to see how the great numbers of later years could have been accommodated. Shortly after this the Auckland Hospital accepted sixth-year students. Wellington delayed for a time but ultimately joined in the scheme. Much gratitude is due to the late Dr. Frederick Bevan-Brown.

In 1924 Dr. Ferguson received the honour of knighthood, which was the recognition of devoted labour and brilliant administrative gifts placed at the service of the School at considerable personal sacrifice for the previous ten years.

In this year also the American College of Surgeons was founded and Sir Lindo Ferguson was elected an Honorary Fellow, and attended the inaugural meeting of the college at Chicago.

While in America he went to Philadelphia and visited the College of Physicians' Library, where he found that there were very large numbers of duplicate volumes for disposal, and he bought between eleven and twelve thousand books at ten cents a volume. He regarded this as a great find for the Medical School library, where some 2,000 additional feet of shelving were required to accommodate the books. The result was perhaps disappointing. It was apparently the custom for doctors' widows in Philadelphia to hand over their deceased husbands' professional libraries to the college, and there can be little doubt that the collection of any doctor who was known to be a bibliophile was inspected, and that anything worth having was removed. But the average doctor's library rarely contains much of permanent value; he has his student's text books, perhaps a standard encyclopædia, which is in all public medical libraries, and ephemeral works on X-rays, vitamins, electrocardiology, and the like, sufficient to keep him in touch with the state of medical knowledge at the moment. A random collection of books taken from such a stock is likely to contain a great deal of matter which is present in all libraries, much that is quite out of date, and any number of duplicates, triplicates, and quadruplicates. In fact, it is doubtful if more than about 1 per cent. will be any real addition to a library, in which case each one retained of a large purchase at this price will have cost not ten cents, but ten dollars, a high figure.

Dr. James Young, of Invercargill, a distinguished student of medical history, presented a number of books to the library. At

this time about £250 a year was being spent on it; £700 was allotted to the University Library, which had to cover the cost of books, journals, and binding. The distribution among Faculties was left to the Professorial Board.

Mr. L. E. Fowler, of Dunedin, offered £700, with subsidy, to endow scholarships, either in aid of research or to be granted to a student in his fourth or fifth year who might be in need of financial help. The latter alternative was adopted; two Fowler Scholarships were established, for which there was considerable competition in the lean years of the coming depression.

Messrs. H. K. Mulford and Co. presented cinematograph films to the School.

The staff required an epidiascope and offered to pay half the cost of it if the Council would pay the balance.

A committee met a sub-committee of the University Council to discuss the Staff Fund, and it was found that between 1915 and 1923 the fund had received more than £5,000, from which about £2,000 had been given away for buildings, lecture rooms, the purchase of radium, and other improvements. The installation of an electrocardiograph was first discussed at this time.

There is a financial note by the Dean on the expenditure on the School at the period. Anatomy, Physiology, Pathology, and Bacteriology cost from £2,000 to £2,500 each, a total of about £9,000 a year. Other salaries, chiefly for Medicine and Surgery, came to £4,800, and general equipment cost £1,500.

The M.D. regulations were slightly modified, in that the paper might be set in future in either Great Britain, Australia, or New Zealand. Hitherto the paper had always been set and marked at Home, with consequently great lapse of time before the publication of the results. In 1923 four persons took the degree of M.D. and 63 those of M.B., Ch.B.

Dr. Drennan resigned the office of Sub-dean and went on leave to England. He was succeeded by Dr. Hercus. Dr. Charles Burns became Medical Tutor, Dr. E. F. D'Ath, Clinical Pathologist (he was later to become Professor of Pathology). Dr. J. A. D. Iverach, M.C., became Travelling Scholar, he was afterwards Physician to the Hospital and Lecturer in Pharmacology. Dr. Harvey Sutton, of Sydney, examined in Preventive Medicine. Messrs. J. A. Jenkins and R. A. H. Fulton became Assistant Surgeons, and Dr. K. A. Ross Assistant in the Eye, Ear, Throat, and Nose Department.

The Faculty of Medicine recommended that a course of twelve lectures should be given to students on the application of psychology to medicine. Through a series of accidents this course was not given. It may be that the Professors of Medicine were insufficiently enthusiastic about this important subject, so that students qualified with little or no grasp of it, and later found and felt themselves to have been inadequately trained. The subject, however, is a very difficult and a very large one, and by no means to be covered by the "few

lectures" often advocated. At this time the views of Dr. Sigmund Freud were greatly in vogue, and frequently little understood, with the result that a number of half-trained enthusiasts were dabbling in his methods, particularly in the matter of sex, and often with deplorable results. Some of the staff felt strongly that this should be avoided at all costs. Naturally, there was not complete agreement on the subject.

Dr. William Mayo, of the Mayo Clinic, Rochester, Minnesota, who was visiting New Zealand, came to Dunedin and addressed the students.

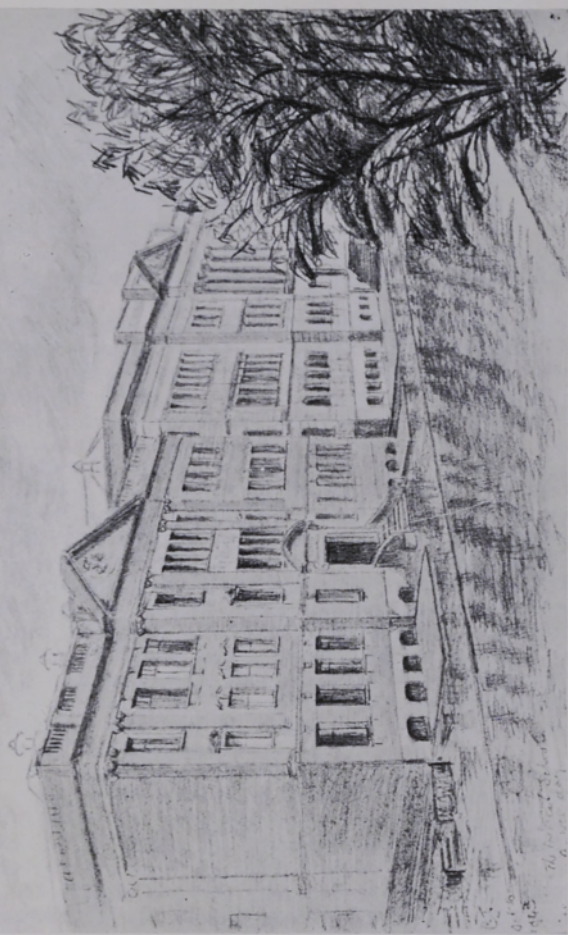
In the following year, 1925, Mr. Gordon Bell arrived and inaugurated his scheme of surgical teaching and organization, and during this year considerable efforts were made to put research on a sound basis in the School. A Royal Commission sat on University Education in New Zealand, including, of course, the special schools.

In this year the Chancellor, Dr. Andrew Cameron, died. Dr. Cameron graduated in 1880, having been Senior Scholar in Zoology. He was elected to the University Council by the Graduates' Court of Convocation in 1894, and sat on the Council till his death. He was elected Vice-Chancellor in 1910, and Chancellor in 1912, and was six times re-elected to the latter office. The following is from the minutes of the University Council:—"The Council gratefully recognizes the dignity, courtesy, and impartiality with which he carried out the duties of the Chancellorship. The notable expansion and high efficiency of the University to-day is due in great measure to Dr. Cameron's whole-hearted zeal, his untiring labours, and his wise guidance in its administration during a very anxious period of its history."

Dr. Cameron was a particularly good friend to the Medical School, and he and Sir Lindo Ferguson worked in very close co-operation. It is said that when he was elected Chancellor he discussed matters at length with his friend, Professor Hewitson, the Master of Knox College, and came to the conclusion, which he expressed, that he could do more towards helping the Medical School than in any other direction.

The architect, after complaints about the slow progress with the new buildings at the end of 1924, announced some improvement early in 1925, and foundation stones were laid by the Hon. James Parr and Sir Lindo Ferguson in June. The building was to be in brick and Oamaru stone, in the "Renaissance" style; it was to be of three storeys and to measure 230 by 100 feet.

Mr. Gordon Bell proposed to establish a "surgical unit" with the professor and two assistants. They were to have a male general surgical ward, a small female general surgical ward, besides special male orthopædic beds, under Mr. Renfrew White, and male genito-urinary beds, under Mr. Jenkins, and beds for jaw and plastic surgery, under Dr. Pickerill. Mr. Roland Fulton, F.R.C.S. (Eng.), was appointed Surgical Tutor, to assist the non-professorial surgeons, Dr.



OTAGO UNIVERSITY MEDICAL SCHOOL BUILDINGS
(On a Wet Day)

From a sketch by the Author made for "The Digest," by kind permission of the University of Otago Medical Students' Association.

Batchelor and Dr. O'Neill. There were also recommendations as to surgical registrars, anæsthetics, X-rays, the Medical Superintendent, and the Assistant Medical Officer. It happened during this year that an unexpected, and as it was thought, an avoidable death occurred which brought the arrangements of the Hospital residents' duties under severe criticism, and reorganization took place. It was suggested that there should be three senior residents instead of an assistant medical officer, one of whom should always be on duty. The Hospital Board was agreeable, but declined to put any further charge on the ratepayers for the necessary salaries, and the University Council was asked to foot the bill, wherein Sir Lindo saw an opportunity for the University Council to increase its control of clinical work. Some division of the cost of the salaries was arranged between the two bodies.

Research was now undertaken on a greatly enlarged scale. Mrs. M. A. Massey promised a gift of £1,000 for cancer study, and the Department of Health gave £200 for the same purpose, which was derived from the estate of a working man who had died of it. Dr. Barnett was much interested, and suggested that a Research Scholar should be appointed at £500 a year for two years, under the direction of Dr. Hercus, to discover the incidence of the disease in New Zealand and the factors affecting it. In a similar investigation in England the Ministry of Health had limited the study to the incidence of cancer in certain sites (breast, etc.). It was decided to do the same here. "Natural duration" of cancer was also to be considered. A little later the English Ministry asked if the conditions in New Zealand as between Maoris and Europeans were suitable—that is, presumably, were sufficiently alike—for an investigation of differences in racial incidence, a matter which it regarded as important. It was thought that they were. The Maori records for ten years were to be taken, so as to give a fairly complete report on a relatively small number of cases. Dr. Noel H. Fulton was appointed "Cancer Research Fellow" for this work.

About the same time the Minister of Health consulted Mr. Renfrew White about research on rheumatism and chronic arthritis, and granted £600 for two years' work, which was to be done under a committee of Mr. White, Dr. Marion Taylor, and Dr. Hercus. Dr. K. R. Steenson was made Research Fellow.

Dr. C. M. Hector was also made a Research Fellow, at £800 a year, to work under Dr. Hercus on Anterior Poliomyelitis (Infantile Paralysis) in monkeys. The Government granted £2,000 for this work.

The promised Royal Commission on University Education sat during 1925. It consisted of Sir Harry Reichel, Principal of the University of Wales, and Mr. F. Tate, C.M.G., Director of Education in the State of Victoria. It sat in each of the four centres. In Otago the new Chancellor, Mr. T. K. Sidey, M.P., the Vice-Chancellor, Mr. W. J. Morrell, and the Treasurer, Mr. L. Deans Ritchie, represented the

University. Sir Lindo Ferguson presented a long memorandum which dealt with the following matters:—Hospital facilities and their use in the other centres, the need for more clinical work and for University control of it; the need for research, indicating that the professors were over-worked and could not give attention to it; that it was necessary that their assistants who undertook it should not find themselves in blind alleys; the library and its budget. In addition, he indicated opposition to the proposal for four universities, and also to a second medical school. He advocated the retention of the New Zealand University degree in Medicine, and found the examination system adequate, but he urged raising the standard of the entrance examination.

The Commissioners' report on the special schools was not without platitudes. They concluded that the aim should be to provide in each professional course the best possible training at some one centre in the Dominion, but that work might be taken in other centres wherever this could be done without increasing cost or lowering efficiency (this suited the Medical School well enough). They advised against the *early* separation into four universities, but they considered that their scheme would form an excellent preparation for this when it was justified by the progress of the Dominion.

Sir Lindo was, of course, harping on very familiar strings in his memorandum, and upon these he continued to play. In the matter of the library he made a handsome gift of £120 towards the purchase of the books from America. He indicated that these books brought in too great an increase of work for a half-time librarian, and urged that Dr. Hogg should be employed whole time, at an increased salary. Some increase was obtained from both the Hospital Board and the Staff Fund, but no whole-time post was yet made. About this time students were admitted to the staff library.

Actually, although Sir Lindo did not say so, the most valuable result of this accession of books was that a new room, a small adjoining class room, was added to the library floor space. A sum of £8 was allowed for each of the eleven departments of the Medical School for library purposes.

During this year Dr. James Young, of Invercargill, gave a course of lectures on the History of Medicine.

The question of a Director of the Medical School was raised, or, alternatively, a whole-time Dean's secretary. The Treasurer was opposed to a directorship, and the matter lapsed for the time.

Sir Lindo took occasion to insist on the peculiar position of the Dunedin Hospital owing to the presence of the School. He wished the School to be entirely responsible for the treatment of patients and the Board for administration. At this time the Health Department was seeking to establish stipendiary staffs in the hospitals and to do away with honorary physicians and surgeons. Sir Lindo was emphatic that this change should not be made at Dunedin. It may be noted that the Education Department viewed with disfavour the

payment of salaries to persons engaged in private practice. There is also an independent note of Dr. Barnett's in the records urging a joint appeal by the Faculty of Medicine and the Hospital Board to the Government for an annual grant to improve the specialist departments in the Hospital.

Dr. Riley had become dissatisfied with his position as Lecturer in Obstetrics, which he had held for fifteen years; he asked for the status of Professor, which was refused, or at least held over, and he also asked for a salary of £400 a year, which was less than that paid to either professor of Medicine. He pointed out that he received fees which were fluctuating in amount, the immediate post-war "boom" in students' entries had ended, and the number in his class in that year was small. In the following year he protested against the salary of the Tutor in Gynæcology being deducted from his fees; the University Council agreed to pay the Tutor.

Dr. John Cairney on his return from America was appointed Assistant Professor of Anatomy. Dr. H. M. Buchanan, the newly appointed Superintendent of Seaclyff Mental Hospital, was offered and accepted the lectureship in his subject. The Plunket Society advocated the training of medical students in Child Welfare. Dr. W. Newlands became Lecturer in Surgical Diseases of Children, and in the following year he offered to do this work without salary, so as to be on equal terms with Drs. Batchelor and O'Neill.

Dr. R. S. Aitken having resigned his Travelling Scholarship on his election to the Rhodes, two travelling scholars were elected for this year, Dr. Alice Rose and Dr. J. Fitzsimmons. The University of New Zealand established a Senior Scholarship in Medicine.

Some progress was made in the matter of an electrocardiograph; the staff voted £50 towards it, and the Board asked the Council to increase its grant to £250. It was in time installed in the basement of the new buildings and connected by wire with the Hospital, the operator of the instrument and the person in charge of the patient communicating with each other by telephone. The operator was Mr. Manson, the senior technical assistant in the Physiology Department, and he was restricted in the time he could give to this work. In later years a portable machine was kept in the Hospital, which permitted of a much more practicable arrangement.

The proposed University Diploma course in Nursing came to grief. Three candidates came forward, but the Health Department declined to pay the salaries of the Tutors, although it had sent women abroad for the necessary training, and even though the Nursing Body was ready to pay half the salary. The Department would assent to the course only on condition that the tutors became Government servants and did their work in Wellington, which naturally had no interest for Otago University. Ultimately a post-graduate course was set up in Wellington.

During this year Sir Ernest, afterwards Lord, Rutherford, O.M., sometime President of the Royal Society, the great physicist, who came originally from New Zealand, visited Dunedin and lectured before the University.

Developments took place in the Logan Park scheme; 8.3 acres were leased to the University for 99 years, the surface and track to be maintained by the City Corporation without charging rent or rates, the University to put up such buildings as it required.

In the following year, 1926, the Government proposed to amend the N.Z. University Act, 1908, in order to give effect to the findings of the Royal Commission; the amendments dealt, among other things, with the special schools. As regards the Medical School, certain proposals were made by the University Council. If the Government would give £125,000 (odd), which was to include the cost of the site, the University would make no further applications for money, but would expect subsidies on voluntary contributions. The Government had offered to make a total grant on these terms, on the understanding that there should be no further demand for several years.

It has been noted that senior resident medical officers were to be appointed at the Hospital; this plan, which was suggested by the Medical Superintendent, Dr. A. R. Falconer, was borrowed wholesale from the prospectus of one of the American Universities, and it included another detail which was thought to have advantages. This was the establishment of a *Joint Relations Committee*, made up of members of the Hospital Board and of the University Council, which was to make recommendations for staff appointments. These included "Chiefs of Service," Medical, Surgical, Obstetric and Gynæcological and Specialist (Eye, Ear, Nose and Throat). These chiefs, who were naturally the professors of the subjects, were to attend the meetings of the Committee, but not to vote. It was decided to pay £400 a year to each of the resident officers, with an additional £100 a year to the senior of them. Half of the salaries were paid by each controlling body. The specialist appointment shortly lapsed.

The research undertaken in the last year came under review. Dr. Noel Fulton had toured the country in his investigations into Cancer. Dr. K. R. Steenson had made studies on arthritis as follows:—In complement-fixation for certain infections; in the correlation of laboratory and clinical work; and in the results of vaccine therapy. His results, like many others of like nature, were negative, but Mr. Renfrew White and Dr. Marion Taylor asked that he should be allowed to continue for another year; this was granted.

The Plunket Society gave £3,000 for a scholarship in memory of Lady King, the deceased wife of Sir Truby King. A Government subsidy was obtained on this sum and the whole was capitalized. The scholarship was of the value of £250 for one year, with a possible reappointment. The scholar was to work under a committee of the Professor of Public Health and the Presidents of the Plunket Society

and of the central committee of the Society. The scholarship was open to Medical graduates of New Zealand or other Universities, for the study of preventive work in Pædiatrics and the Health of Mother and Child, prenatal, intra-natal and post-natal, and of the Child up to School Age.

A Mrs. Dunbar left a house in London Street, Dunedin, to the University to endow a Research Scholarship in Medicine for graduates up to five years standing; certain subjects were selected for research, and the scholarship was to be given for a thesis presented on the one chosen; these turned out to be impracticable conditions.

The Librarian's appointment was still unsatisfactory. A man's whole time was required for the work, but no adequate funds were forthcoming for his salary. The Minister of Education approved a grant of £300 for half a year, which was not renewable, to cover the period "pending the reorganisation of the finances of the Medical School." The grant was not renewed, and there was the greatest difficulty in attaching any sort of income to the post; the Dunedin doctors made a subscription, and something was obtained from the Staff Fund, on which no subsidy was payable. It was all very disagreeable. The library facilities for outside practitioners were improved, and abstracts of articles were made on payment of fees, but no books or journals were allowed to be sent out of the building.

It is recorded that the New Zealand medical graduates subscribed a sum towards a future, and somewhat visionary, Medical Students' Hostel.

Dr. St. L. Gribben succeeded Dr. Buchanan as Lecturer on Mental Diseases.

The sum paid for Pathological and Bacteriological work by the Hospital Board was raised to £1,000 a year.

The Dunedin Branch of the Howard League for Penal Reform asked the University to form a Committee for Mental Hygiene, with a Professor of Psychiatry; the Council replied that it had no funds available. A year later the Branch asked for a Lectureship in Experimental Psychology, but received the same answer.

Dr. Malcolm was appointed to the Board of Scientific and Industrial Research, and, independently of this, he asked for an Associate Professor of Biochemistry; this request was not granted.

The Medical Council sent a committee to Dunedin to inspect the medical examinations in progress.

It was in this year that final year students were first allowed to attend the Auckland Hospital, where the Board undertook to find accommodation for them in the neighbourhood of the Hospital.

Dr. Derek Denny Brown was elected to a Beit Memorial Fellowship; he held this at Oxford, where he worked under Sir Charles

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Sherrington, the Professor of Physiology, with marked success, and within a year or two he was collaborating in work on Muscle Tone with the Professor, which was communicated to the Royal Society. Later on Dr. Denny Brown took up the study of Clinical Neurology, and became a member of the staffs of the National Hospital for Diseases of the Nervous System (Queen Square) and St. Bartholomew's Hospital, both in London. In process of time he was elected Professor of Neurology at Harvard University.

CHAPTER XVII

1920 — 1929 (Continued)

NEW BUILDINGS OPENED

IN 1927 the new Medical School buildings were opened by the Hon. W. Downie Stewart, for many years a member of Parliament for a Dunedin constituency, and also a member of the Cabinet in which from time to time he had held many important portfolios.

The Department of Anatomy was described by Dr. Gowland in *Methods and Problems of Medical Education*, published by the Rockefeller Foundation, New York, 1930. In the basement there were workshop, embalming room, insulated chamber for cadavers, storage and macerating rooms, with a freight-lift to the second floor. On this floor was the dissecting-room (60 by 49 feet), lighted from the roof and from windows on two sides, with tanks, sinks, blackboards and diagram screens. There was an annex for small classes and a prosectorium and store-room. There were two lecture theatres (49 by 36, and 38 by 26 feet), one with an epidiascope, and with draughting room and diagram storeroom. There was a departmental library, and there were rooms for the Professor, the demonstrators and the laboratory assistants, and a demonstration room. The Museum (105 by 31 feet) had a ground floor and a gallery, and housed Dr. Scott's collection of Maori bones. On the third floor was the Histology classroom (44 by 40 feet) with preparation, store, oven and sink rooms. There were also research and students' laboratories.

It was estimated that the cost of maintenance of the new buildings would be £1,000 a year.

Up to this time the Professors of Medicine and Surgery had had no private accommodation whatever. The professors of laboratory subjects all had rooms of their own, but one of the medical professors was often heard to remark that in a department which maintained two professors and a lecturer, the head of it had not so much as a peg of his own on which to hang his hat. All, however, had good rooms in the new buildings, and Dr. Carmalt Jones was even allowed to conduct his small consulting practice there, but this was not to constitute a precedent.

The first event of importance to take place in the new buildings was the second meeting of the Australasian Medical Congress of the B.M.A., which was largely managed by the Otago Medical School. Dr. Louis Barnett, the Professor Emeritus of Surgery, was President

and the Professors of Anatomy, Pathology and Systematic Medicine were the executive committee. Dr. Barnett was abroad for part of the time of preparation, but the others met at lunch once a week for three years to discuss progress; all were thus constantly aware of how things were going, and the plan had much to recommend it. The Congress was highly successful, but it does not concern this history. On the King's Birthday following, Sir Louis Barnett received the honour of knighthood. In this year he gave £250 towards the Logan Park Athletic Ground.

The Librarian's salary still presented great difficulties. The last Government grant was made in May, and there was no visible source of payment for the following August. Dr. Hercus drew attention to Dr. Hogg's work in purchasing and binding books, in keeping touch with other libraries for exchange and in the preparation of extracts. The Faculty of Medicine was very desirous of keeping Dr. Hogg and offered to dispense with the services of their highly skilled modeller, Mr. Kelsey, if his salary might be transferred to the Librarian. The Council dispensed with Mr. Kelsey, since the School did not want him, but retained his salary. Ultimately Dr. Hogg was retained at half his former pay, which was defrayed by the Council.

The Library had, however, one piece of good fortune during the year. Dr. Charles Monro Hector offered 300 volumes to the Medical School on condition that they were called "The Monro Collection" and suitably housed; they were then in the General Assembly Library in Wellington, and the Cabinet sanctioned their removal to Dunedin. These books were collected by three generations of Alexander Monros, Primus, Secundus and Tertius, who were successively Professors of Anatomy in the University of Edinburgh from 1720 to 1826; Monro Primus was the first teacher of the subject there. A number of the books were written by one or other of the Monros.

David Monro, son of Tertius, came to New Zealand before the time of the Scottish emigration thither. He accompanied Tuckett in his journey of exploration through the South Island. He sat in the New Zealand Parliament, of which he became Speaker, and he was knighted. His daughter married Sir James Hector, and was the mother of Dr. C. M. Hector. In the Registrar's letter of acknowledgment to Dr. Hector he remarked that: "In the opinion of people capable of forming a good judgment, the books form a unique collection of which any medical school in the world would be proud." In a few years a rearrangement of the Library allowed of the collection being really suitably housed, and a later librarian, Dr. W. J. Mullin, kindly presented a showcase for the display of historical volumes.

Otherwise, 1927 was largely a year of resignations. Dr. Cairney resigned his associate professorship of Anatomy, having obtained a more lucrative appointment elsewhere as medical superintendent of a hospital. He was succeeded by Dr. Archibald Durward, who made further researches on the tuatara brain, with considerable success, as

is recorded later. Dr. Muriel Bell resigned her post in the Physiology Department. Dr. Pickerill resigned the Chair of Dentistry and his minor appointments at the General Hospital and the Medical School.

Dr. Marshall Macdonald resigned his beds at the Hospital on being appointed Physician for Nervous and Mental cases. This appointment was created at the Government's instance, and was intended to permit of the early treatment of cases of incipient insanity in the hope of preventing their later certification.

A payment was made for the research on rheumatoid arthritis, which was to be final unless strong reasons for its continuation were shown. The Committee pressed for its continuance, but Dr. Steenson resigned on appointment to the Solomon Islands as a Rockefeller Research Fellow; Dr. Duncan Cook succeeded him for a time, later becoming Clinical Pathologist.

Miss H. M. S. Thomson became a research student in Goitre. Dr. Hercus was appointed a member of the Town Planning Board, with the University's consent. Dr. Malcolm was allowed to use the Physiological Laboratory for nutrition research under the Scientific and Industrial Research Committee.

Owing to the small number of students then in attendance, the use of Redroofs, the Salvation Army Maternity Hospital, was not required for the time being.

Dr. Oscar Moller, M.R.C.P., became Resident Medical Officer and Tutor, but resigned at the end of the year and was succeeded by Dr. Claude Taylor, M.R.C.P. Dr. Burns, the first to hold this post, was M.R.C.P., and it was thought desirable that all future tutors should hold this diploma, and all did so for as long as the appointment continued in that form, some sixteen years. Dr. James Fitzsimmons, F.R.C.S., became Resident Surgical Officer and Tutor. The salaries of both were raised to £500 a year, and the Board was able to dispense with a house surgeon.

Mr. C. D. Costello won the B.M.A. prize for final-year students outside the United Kingdom, which thus went for the second time to a New Zealand student.

Dr. L. S. Rogers became Travelling Scholar.

The graduates presented a bust of Pasteur which was set up in the old (1916) Medical School building; it is a replica of that in the Pasteur Institute in Paris. Mr. Anscombe, the architect, presented a bust of Lord Lister, which was placed in the entrance hall of the new buildings. Mr. William Crow, of Wellington, settled £1,000 after a life interest had expired, the interest to be paid to Otago University for "Research in a Medical, Surgical or Dental subject, preferably the cure or prevention of disease in children and adolescents."

Mr. W. H. Travis of Christchurch made a bequest of £40,000 "for assisting scientific investigation in New Zealand into cancer and phthisis." It was not specified where this work was to be done, and the bequest was not made to the Medical School. It was suggested

that this should be combined with the Cancer Research Fund, since both had the same object; they were, however, kept separate.

During this year the first move was made towards the reorganization of the teaching of Midwifery and Gynaecology. The changes made were very important and far-reaching, and their description is deferred to the next chapter.

In 1928 the Fowler Scholarship was settled. It was decided to grant two scholarships, which were only tenable in Dunedin, and so were given to students in their fifth year, since sixth year students were mainly in other centres.

Dr. Helen Easterfield was awarded the Lady King Scholarship and she was to continue a research on the Milk of New Zealand Women, upon which she was engaged in preparation of a thesis for the degree of M.D. A year later, she was succeeded as Lady King Scholar by Dr. Vida Grater.

Dr. W. P. Gowland was granted a Rockefeller Fellowship for travel in Europe and America. In this capacity he represented New Zealand at Toronto at the Thirteenth International Physiological Congress and at an Anatomical Congress at Utrecht, where anatomical terminology was discussed.

Dr. Andrew Begg, of the Imperial Cancer Research Fund, represented the University at the International Congress on this subject.

Dr. Colquhoun, with the Hon. Dr. Collins, represented New Zealand and the School at the Harvey Tercentenary in London, and Dr. Colquhoun presented an address to the President of the Royal College of Physicians.

Dr. Murray Drennan was elected to the Chair of Pathology at the Queen's University of Belfast, and a few years later he was translated to the corresponding Chair in the University of Edinburgh. He was the first fully trained pathologist at the Otago School, where he established a very high standard in his subject, and this was maintained by his successor, a former pupil. A first-rate organizer, as was manifest at the Australasian Medical Congress, he was Sub-Dean for five years, and in that capacity was consulted by any of his colleagues who were in administrative, or indeed in other, difficulties. The present writer can recall his own arrival in Dunedin where Dr. Drennan met him at the railway station and drove him and his family—all total strangers—in his own car to the rooms he had had the forethought to engage for the newcomers, and this at a time when a confinement was going on in his own house. A great man of his hands, Drennan made the most of the fishing and camping facilities of this country, and many of his colleagues long recalled pleasant days with him in the backblocks.

His vacant Chair at Otago was advertised by the High Commissioner in the British Journals; it was also advertised in Australia and New Zealand. The selection committee were Professors Lorain Smith (Edinburgh), Beattie (Liverpool), and Stewart (Leeds). It

was stated that the Professor would not be the Government Pathologist (this had meant an additional £100 a year); he was to deliver the systematic lectures and give a course in pathological histology; perform pathological histology and make post-mortem examinations at Dunedin Hospital, and do clinical pathology for the Hospital and its subordinate institutions and for general practitioners, in association with the clinical pathologist. At a later date it was decided that the lectureship on Medical Jurisprudence was not an integral part of the duties of the Professor of Pathology, but that he was eligible for the post.

The salary was £1,000 a year, which was found to be too small to attract any suitable candidate from Home. Two local candidates applied, from whom Dr. Eric Frederick D'Ath, M.B., Ch.B. (N.Z.) was elected. Dr. D'Ath was at this time Pathologist at the Royal Prince Alfred Hospital, Sydney, and Lecturer in Pathology at the University there. In the following year Dr. Morris Watt became assistant to the Professor of Pathology, and Dr. E. F. Fowler to the Professor of Bacteriology.

Dr. A. J. Hall resigned his lectureship on the Ear, Nose and Throat on account of ill-health, and never resumed it. He was succeeded by Dr. W. E. Carswell.

The financial difficulties were still serious. Dr. Hercus wrote the annual report in the absence of Sir Lindo Ferguson, and he laid emphasis on the inadequacy of the Government grant, pointing out that a provincial university could not maintain a national school. More money would be required than was available for the School to conform to the General Medical Council's requirements in Obstetrics and Gynæcology. There were inadequate funds for a proper course in Pharmacology; the penury of the Librarian's salary was noted. Their men were leaving to take more lucrative posts elsewhere. There had been a very poor entry for that of assistant in his department owing to the low salary offered. The students' fees had been increased, but this did not give a sufficient increase in revenue. Later on a special grant of £6,000 a year was wrung from the Government for the Medical School, together with a "certain proportion" of the University's resources.

Dr. Hector, after his researches on poliomyelitis, which had stopped owing to the cessation of the epidemic which had required them, was studying pollens; Dr. Morris Watt, before his appointment in Pathology, had investigated hay fever and also sandfly venom, and the Government started an enquiry into stillbirths, and mortality in the first month of life. Sir Lindo later on submitted a report on the researches conducted in the School, and besides the above he noted those of Dr. Malcolm on foods, on New Zealand fish, on vitamins and on "tutin" (the poisonous body in tutu, a native plant which was very destructive of sheep and cattle in the early days); those of Dr. Champtaloup on the preservation of foods, on cerebro-

spinal meningitis, influenza and pneumonia; those of Drs. Cairney and Durward, which he described more specifically as being on the fore-brain of tuatara, the embryology of its brain, with other work on the same lizard, the nerve-endings in its muscle, and its heart and vascular system.

Some of this work was presented by Durward for the degree of M.D. under the title of "Cell-masses in the Fore-Brain of *Sphenodon Punctata*," upon which Dr. Elliott Smith, Professor of Anatomy at University College, reported: "The work is one of exceptional interest and importance from the fact that the state of affairs revealed in the brain of the most primitive living reptile is a unique and critical phase in the evolution of the cerebral cortex, concerning which information has been lacking hitherto. . . . For the first time an adequate and reliable account of the differentiation of the cerebral cortex in *sphenodon* has been given which several anatomists, including the writer, have attempted in vain. . . . It is an investigation that has a permanent value, and will redound to the credit of the University of New Zealand, hence I recommend Mr. Durward for the degree of M.D."

It had recently been decided that "the degree of M.D. may be obtained *by thesis only* if of exceptional merit and a contribution to knowledge of real importance." Unfortunately all examiners have not interpreted this instruction so literally as Dr. Elliott Smith.

A note may here be made on an item in Professor Hercus' course in preventive medicine, which appears to be unique. It is the custom for the staff to hold examinations for "terms" before the students sit for their qualifying examinations, and Hercus decided to replace that in his subject by a "thesis" on some subject in preventive medicine selected by him. The students were to work in pairs, generally doing field-work through the fourth summer vacation, and were to present the thesis at the end of the fifth year, when each paper was to be read before the class. During the year they were to refer the work to Dr. Hercus, who would advise on the use of books, on the proper exposition of the subject, and so forth. This is referred to in Sir Lindo's letter to Dr. Allan Gregg. The plan was adopted, and a great many subjects were thus studied, and a considerable amount of valuable information was obtained. The work of course varied from mere academic exercise to studies showing real resource and capacity for investigation. The superintendence and evaluation of such work added greatly to the labours of the Professor, and its maintenance for more than twenty years is evidence of very devoted service.

The Health Department, which strongly approved of Hercus' methods, offered the services of Dr. Maclean, the District Health Officer, to the School for periods equivalent to one day per week, to assist in the practical teaching of Preventive Medicine.

The Faculty of Medicine approved an examination in Applied

Physiology as well as Applied Anatomy, to be taken in the first section of the final examination.

Dr. Hogg made a report on the Library, and noted that the Departmental Libraries of Anatomy and Physiology were housed in their respective premises and separately conducted, though controlled by the main medical library. Books or journals in the former might be lent to a professor in another department or to a research worker in another college at the discretion of the head of the department, and under guarantee. There was a great increase in the use of the library by students and research workers, who often asked for foreign journals which were not subscribed for. There were 5,027 books and 4,032 volumes of journals and transactions. Two hundred and eighty volumes had been added during the year, of which 73 were books and the rest bound journals. One hundred and ten journals were regularly received.

The University of New Zealand applied to the Carnegie Trustees for £20,000 for college libraries—£4,000 for each centre and £2,000 for each agricultural college. The Trustees called for a statement of the position of the libraries. The Faculty of Medicine resolved that any money which it might receive from this source should be spent on foreign journals.

Dr. R. B. P. Monson left £100 for a memorial medal for Clinical Surgery in the final examination. The Finance Committee recommended that the money should be spent in the purchase of works on surgery, since a medal was already in being.

Sir Lindo Ferguson presented a most interesting film which demonstrated "tissue culture," prepared by Dr. R. G. Canti. This film was shown throughout New Zealand to raise funds for the Cancer Campaign.

Sir Louis Barnett gave the final instalment of his generous gift of £1,000 to the Logan Park Fund.

This year Sir Lindo Ferguson ceased for a time to be a member of the University Council, representing the Professorial Board, after fourteen years' service.

Mr. Victor Bonney, the distinguished gynaecologist of the Middlesex and Chelsea Hospitals, visited New Zealand as the representative of the B.M.A., and delivered the opening address of the School session.

The old Officers Training Corps had been defunct for some years, but it was now resuscitated as the Otago University Medical Company, in which the whole of the male medical and dental student body came to serve. It was under the command of Major Hercus, who asked for equipment, a museum, a library, and tools for the improvisation of requirements. These were refused on financial grounds, and the Defence Department would give no help.

The students asked for an extension of bursaries, which were only of three years duration. Arts students completed their courses in

three years, whereas medical students continued as such for six. Occasionally bursaries were given in the fourth year, and the students were particularly anxious to get them for the fifth. The Faculty of Medicine supported the request.

In 1929 Dr. Fitchett reported on the teaching of Pharmacology. He advised that instruction in dispensing at the Hospital should be given up, but that the didactic lectures should be continued and that a practical class should be conducted by a medical man with clinical experience, as assistant to the professor. Dr. J. A. D. Iverach was appointed to this post. Dr. W. S. Fogg, of the Physiology Department, went to work in the Western Reserve University, Cleveland, Ohio, to study practical Pharmacology under Professor Sollman.

At long last Dr. F. R. Riley was appointed Professor of Obstetrics and Gynæcology for two years, with Drs. R. I. Ritchie and Charles North as his tutors. The Board of Education granted £600 a year for his salary, £200 for the Tutor in Obstetrics and £150 for one in Gynæcology, and £100 for a general practitioner to be engaged to attend to normal cases.

The new professors—Mr. Bell, Dr. D'Ath, and Dr. Riley—all pressed for improvements in the museum. Dr. Drennan had made a large collection of specimens, but they were not displayed to any advantage. Mr. Bell laid emphasis on increased shelving arranged in bays and the need of a trained man to mount the specimens. Dr. D'Ath asked for show-cases, linoleum, lighting, and jars, to cost about £400. The requests were granted, and Mr. Kelsey's services were retained for a year to complete the work.

Reviewing the budget of the School, the Dean remarked that it was less than £20,000, while similar schools in England were spending £30,000 to £100,000; there, Government grants up to £16,000 were made to individual schools, but here only £6,000 was received. This year the Dunedin Savings Bank made a grant of £500 to the School.

In these bad days of financial depression Sir Lindo Ferguson proposed to form a "Loan Fund," which, like most of his proposals, ended in something concrete. Some £2,000 was subscribed by private donors, whose names were not to be published. Subsidy was asked for, but not given at this time; later £1,000 was granted. The University Council became trustees of the fund, which was capitalized, and the interest was made available for loans to students of proved capacity who had passed the second professional examination but who found financial difficulty in their fifth or sixth years in completing the course. The loans were to be interest-bearing after three years, and repayments were to be added to the capital sum. The fund was not to be advertised in the Calendar, and the names of recipients, as of donors, were not to be published. In later years a number of recipients, on repayment of their loans, wrote very gratefully of the help they had had therefrom.

Mr. C. W. S. Chamberlain, an officer of the Customs Department and an old friend of Sir Lindo's, left £12,000 in trust to the Faculty of Medicine.

During this year Dr. Hercus was granted £500 for Goitre Research, and a chemist was appointed for that work. Dr. Andrew Begg was appointed to conduct research in Cancer, and a sum of £66 13s. 4d. was received from the estate of Mrs. M. A. Brown towards the same object. Mr. Sampson Handley, of the Middlesex Hospital, attended the annual meeting of the B.M.A. and laid stress on the importance of this research.

Other visitors during the year were Dr. McMechan, an American authority on anæsthetics, and Dr. MacKeith, Dean of the Oxford University Medical School. The latter took occasion to remark on R. S. Aitken, D. E. Denny Brown, and A. E. Porritt as the most striking group in the Oxford School which had joined it from any one institution.

Wilton Ernest Henley was elected the third medical Rhodes Scholar from Otago. He entered at New College, where he was Steward of the Common Room—that is, the undergraduate social head of the college, and he played Rugby football for the University. He afterwards followed Porritt to St. Mary's Hospital, and after qualification at Oxford he became Radcliffe Travelling Fellow, and so a Fellow of University College there. This fellowship lasts for two years, one of which is spent in England and one abroad. Dr. Henley returned to New Zealand for his second year, and remained there, unlike the other medical Rhodes Scholars. He also held the Lady King Scholarship. All this was some years later.

The Professorial Board approved the compulsory retirement of professors at the age of 65, which was not in the agreements signed by the existing members of staff, and this was a matter of serious importance to a number of them. After considerable discussion it was decided that the present staff might have their appointments prolonged from year to year till they reached the age of 70.

Dr. Helen Dougall became Lady King Scholar, and Dr. D. U. Strang succeeded Dr. J. Fitzsimmons as Resident Surgical Officer and Tutor.

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CHAPTER XVIII

1930 — 1939

ENDOWMENT OF THE CHAIR OF OBSTETRICS A WHOLE-TIME CLINICAL CHAIR

IN the previous decade the experiment of employing part-time clinical professors had been tried. The professors themselves did not find it an unqualified success. The salaries were small, a good deal of time was required for the adequate discharge of the duties, and the interference with the smooth running of private practice was considerable. Further, the Education Department expressed unwillingness to pay salaries to persons engaged in private practice. Whole-time appointments were being made in medical schools in England and elsewhere, and efficient teaching up to modern standards is a very engrossing occupation. It was decided to try the experiment of a whole-time Chair of Obstetrics and Gynæcology.

It has been shown that the arrangements for teaching Midwifery were far from satisfactory. As long ago as 1921 the Chief Health Officer had emphasized the importance of good training in the subject and had advocated a Chair rather than a lectureship, but the University could not establish the Chair for lack of funds. A few years later, in 1924, Dr. Valintine, in conference with Dr. Jellett, advised the building of a maternity hospital in Dunedin to replace St. Helens and the Batchelor. Dr. Riley's application for a professorship, first made in 1925, was held over till 1929.

In November, 1927, Dr. Jellett reported that for the teaching of Obstetrics at Otago both the clinical material and the funds available were inadequate. The midwives were likely to be better trained than the doctors. But doctors were called in to deal with emergencies, which occurred in about 20 per cent. of all cases, and if they were ill-instructed they were likely to fall back on surgery. He estimated the requirements at (1) a Professor of Obstetrics; (2) a Tutor in Obstetrics; (3) a Tutor in Gynæcology; (4) a Maternity Hospital with adequate occupied beds and a Resident Medical Officer; (5) a Gynæcological Hospital, which might be part of either the General or the Maternity Hospital; (6) a medical staff, which was also to be the teaching staff.

At Otago University he found that there was no Professor, the Tutor in Obstetrics was underpaid, and there was no paid Tutor in Gynæcology (Dr. North had volunteered to do this work without



THE ORIGINAL DUNEDIN HOSPITAL BUILDING, 1866



THE HOSPITAL AS REBUILT, 1935

pay.) The maternity hospitals were inadequate, both were small, and both were used for training midwives, and there was no accommodation for a resident medical officer. At one of them the University did not control the teaching, and neither the professor nor the tutor were on its staff. The Lecturer on Midwifery had no maternity hospital.

Dr. Jellett advised therefore the appointment of a Professor of Midwifery and Gynæcology at an adequate salary, and the retention of the tutors at increased salaries. The St. Helens and Batchelor Hospitals should be replaced by a modern maternity hospital, with accommodation for a resident medical officer and for resident students. Tutors should be appointed at the St. Helens Hospitals in Auckland, Wellington, and Christchurch. As to funds, he had hopes of private benefactors, and suggested that the Health Department should make it part of their propaganda against maternal mortality.

Dr. Hercus reported in much the same sense, and pointed out that each student now required twenty cases instead of twelve, and that the number of students was again increasing. It was estimated that a hospital of 50 beds would cost £39,000, and that salaries would cost £1,500 a year.

The matter came before the Faculty of Medicine, which reported to the University Council that it desired to reorganize the teaching of Midwifery and Gynæcology, to which end it advised:—(1) That the training of midwives in Dunedin should cease, that St. Helens Hospital should be put under the control of the University Council, and that the St. Helens Hospitals in Auckland, Wellington, and Christchurch should be open to students, with recognized teaching under organized tutors; (2) that these tutors should be paid by the Health Department; and (3) that St. Helens and the Batchelor should be amalgamated, as suggested by Drs. Valintine and Jellett.

This, as may be seen, was merely an emasculated form of Dr. Jellett's recommendations. Dr. Riley estimated the cost of the necessary equipment at £150 to £200, with an annual expenditure of £25 to £50.

These views did not go nearly far enough. A New Zealand Obstetrical Society had been started, under the presidency of Dr. William Irving, of Christchurch, and with an exceptionally able and vigorous honorary secretary in the person of Dr. Doris Gordon (*née* Jolly). The society sent a remit to the University Council to the effect that the teaching of Obstetrics was inadequate, and that the teaching staff and the equipment for teaching purposes should be increased. Emphasis was laid on the existing high maternal mortality. The society received Dr. James Fitzgerald, of the University Council, to discuss propaganda, and it was suggested that a meeting of the Ministers of Health and Education with representatives of the University Council and the Hospital Board should be arranged. The Executive Committee of the B.M.A. advised the addition of Dr. H. E.

Gibbs and Sir Donald McGavin, of Wellington, to the deputation, and the Obstetrical Society proposed Dr. Irving.

There appear to have been difficulties in assembling the personnel of this deputation; the Hospital Board did not wish to be represented on it, Dr. Irving suggested his vice-president, Dr. T. F. Corkill, in place of himself, Sir Donald McGavin could not serve, and Dr. Riley, who was examining, was represented by Dr. R. I. Ritchie. However, the Hospital Board agreed to give up training midwives at the Batchelor Hospital, if they were reimbursed for the cost.

The National Council of Women, which was informed of the deputation, resolved that "In view of the high rate of maternal mortality in New Zealand, the National Council of Women of New Zealand urges the establishment of a Chair of Obstetrics in New Zealand, to control more efficiently this most important branch of the medical profession." A little later this body undertook to raise funds for a maternity hospital, and a committee was formed of members of the University Council, the Hospital Board, the Faculty of Medicine, and the Obstetrical Society, to advise the University Council. The funds ultimately raised were invested to pay the professor's salary.

In support of the idea the graduates, at the annual meeting of the B.M.A., asked for an up-to-date maternity hospital to be built near the General Hospital. The Hospital Board was concerned about the prospect of being involved in the necessary expense.

The proposals of the deputation were for a Professor, a Tutor in Obstetrics, and a general practitioner for normal cases (to be replaced in the maternity hospital by the Obstetric Tutor), the cessation of the training of midwives, accommodation for internal students, a grant for equipment, and, finally, a maternity hospital with an Obstetric Tutor and room for six students. The Health Department agreed in principle to most of this, and there was an immediate increase in the Government grant from £4,784 to £6,000 to cover the increased cost in Obstetrics.

A great deal of negotiation had to be gone through. The Education Department was asked to sanction the Chair of Obstetrics, when the necessary financial arrangements had been made. The Minister agreed, and this was included in the New Zealand University Amendment Act of 1928. It was pointed out to the Health Department that a Chair of Obstetrics would be useless without a proper maternity hospital, and shortly afterwards the sum of £50,000 was put on the Public Works Estimates for this purpose, pressure having been brought to bear by the University Council and the Hospital Board. Not long afterwards possible sites in Dunedin were considered.

Not everyone was in favour of a whole-time Chair. Sir Lindo made a number of enquiries among the schools which had them, and reported that the Rockefeller Foundation supported the idea, which, however, it considered open to the objection that the best men would

not give up practice in order to take professorships. Still, it was decided to make the appointment.

In evidence given before a Parliamentary Committee the need for a maternity hospital and a whole-time professor at this salary was emphasized by Sir Lindo Ferguson, in addition to the general scheme of building long ago put forward by him.

The Faculty of Medicine advised that on the retirement of Dr. Riley a whole-time Professor of Obstetrics and Gynæcology should be appointed at £2,000 a year. The New Zealand Obstetrical Society then made the following declaration:—That since the Government had granted £50,000 for a maternity hospital the Society proposed to inaugurate an Endowment Fund of £25,000, to carry subsidy, in order to pay £2,000 a year to the professor, and still to have some income in hand. It pressed for a whole-time appointment, and also asked to be represented on the Selection Committee. This was signed by Dr. Irving and Dr. Doris Gordon.

The endowment of the Chair of Obstetrics was a very remarkable achievement. The appeal to the public was to be made through the women's societies; there were to be public meetings of women and executive committees of women. Specified sums were to be raised in each provincial district, which were to vary with their respective populations. Thus Auckland and Wellington were assessed at £7,500 each, Canterbury and Otago at £5,000 each. Local committees of women were to be in charge of all of them. The Obstetrical Society would hand the money over to the Otago University Council as an endowment for the teaching of Obstetrics and Gynæcology.

The society's appeal was signed in December, 1929. In May, 1930, Dr. Gordon handed over £25,000 to the University, and advised that some £6,000 was to follow for a Scholarship and Research Endowment in the Departments of Obstetrics and Gynæcology. The executive of the society also made the following recommendations:—The professor-elect should travel for six months in England, on the Continent, and in the United States for study; the Selection Board should consist of Dame Louise McIlroy (Dean of the Royal Free Hospital), Mr. Victor Bonney, Professor Murray Drennan, Dr. R. J. Johnston (Professor of Obstetrics in the University of Edinburgh), and Dr. William Irving. Later Sir Ewan McLean (Cardiff) was added to the list. The appointment should be "whole-time," without private practice, any consulting fees received were to be paid into the departmental funds. The professor should be adviser in his subject to the Health Department, with the consent of the University Council and without interference with his teaching duties. He should give the lectures in Obstetrics and Gynæcology, should control and supervise the maternity hospital, and give practical instruction in Obstetrics, including the pre-natal and post-natal periods. He should be Gynæcologist to Dunedin Hospital, and teach that subject, and incidentally remodel the department.

The University Council very properly adopted the following minute:—"The Council hereby places on record its keen appreciation of the assistance which has been rendered to the cause of medical education by the New Zealand Obstetrical Society, through whose magnificent efforts this sum has been raised for the Chair of Obstetrics and Gynæcology, and especially conveys its thanks to Dr. Doris Gordon, honorary secretary of the society, for her unselfish efforts to carry the campaign to a successful end. It is both appropriate and gratifying that one of our *alumnae* should have taken so prominent and successful a part in obtaining public recognition throughout the whole of New Zealand of the national character of the Medical School and of the necessity of national support to medical education. Dr. Doris Gordon, by her action, deserves well of the public and of her Alma Mater."

It may be remarked, further, that this considerable sum was raised in a period of depression and just after an appeal on account of the Cancer Campaign.

It was felt that Dr. Gordon was by no means over-decorated in 1935 with the M.B.E.

The only fly in the ointment was that the feelings of both Dr. Riley and Dr. Ritchie was a good deal wounded in the course of these efforts. In advocating reforms which were characterized as extremely urgent there were implied aspersions on the previous conduct of the department; that was nobody's intention; everyone knew that the old staff had used their poor tools to the best advantage, and the Faculty of Medicine took occasion to endorse all they had done. They felt, however, that their twenty years' work had been unduly discredited, and they asked for some rebuttal when the campaign was over. The Council placed on record "Its appreciation of the valuable services of its teachers in this department for years past. Dr. Riley and Dr. Ritchie have both ably performed their duties and achieved success in their teaching in the face of considerable difficulties."

The salary of £2,000 a year was far in excess of anything yet paid, and the Minister of Education enquired of the Council if their other professors would approve of it. The Council approved the salary, and pointed out that the salaries of their professors varied, some of the professors were "part-time" and were allowed private practice. The Professorial Board, to whom it was referred, found themselves incompetent to express an opinion, but pointed out that the superannuation arrangements would be grossly unfair to anyone receiving this salary. A man of 36 would be required to pay £140 a year, for which at the age of 65 he would draw £300 a year, having paid £4,200.

The Obstetrical Society next offered a scholarship, open to graduates who had served for twelve months as house surgeons in New Zealand, which was tenable at the Women's Hospital in Melbourne, the holder to act as house surgeon. Later this was extended

by a grant of £80 to enable the scholar to work at Obstetrics or Gynæcology in Great Britain.

The society gave £6,000 for this scholarship, and a question arose as to the legal right to devote this money, ostensibly subscribed for a Chair, to a scholarship. It was suggested that a clause might be inserted in the "Washing-up Bill" at the close of the Parliamentary session, which should grant permission. At any rate, the money was invested, and it was decided that for fifteen years the income should be devoted to scholarships, and after that to research. A large proportion of this money had been subscribed in Auckland, and it was finally arranged to establish two scholarships, each of two years duration, of £150 a year, six months to be spent at Melbourne and eighteen months in Great Britain. These scholarships were to be given in alternate years, and to be known respectively as "The Obstetrical Society's Scholarship" and "The Auckland Scholarship in Obstetrics and Gynæcology." The part of the scheme relating to Great Britain did not work quite satisfactorily, and a few years later the Chancellor wrote to the University of London pointing out the difficulties of the Obstetric Scholars in getting specialist appointments, and asking if a place could be reserved for them at the British Post-graduate School at Hammersmith.

For the time being Dr. Riley, Dr. Ritchie, and Dr. North were invited to carry on the department till February, to which they consented.

There was, meantime, much delay over the new hospital and even the choice of its site. The Minister of Health, the Hon. J. A. Stallworthy, when visiting Dunedin in 1929, was strongly urged to assist, and at the end of that year there was a meeting between Dr. M. H. Watt (then Director-General of Health) and representatives of the University Council and the Hospital Board. Some sort of agreement was reached for a hospital of 40 beds, with rooms for a resident accoucheur and for five students. The Hospital Board, naturally enough, was greatly concerned to know who was to bear the cost of administration of this institution. The Government offered £2,000 a year for five years for maintenance, but failed to make itself clear about reconsideration at the end of this time. The Board was afraid of being saddled with this additional cost, and was in no hurry to settle the site.

There was much discussion about the site. Two sites were available, one was situated one block east of the Hospital, in Cumberland Street; this was occupied by the Dunedin Bowling Club, which indicated that it would oppose its selection, tooth and nail. The other site was in London Street, only five or ten minutes' walk from the Hospital, but quite detached therefrom, and situated some distance up a steep hill. It was, however, a little cheaper, and was on this account, and for its detachment, preferred by the Board. The London Street site was chosen at a joint meeting of the Board and the Council, at which the Dean was present.

There was, however, much disagreement and consequent delay. The Faculty of Medicine was strongly in favour of the Cumberland Street site for the following reasons:—The teaching facilities were better; it was undesirable to separate (topographically) Obstetrics and Gynæcology; it would be more economical, as there would be substantial saving in the costs of construction, maintenance, and management; proximity to the Hospital was in the interests of the patients (St. Helens Hospital was notoriously too far away). For some curious reason, which the event completely traversed, it was thought by some responsible people that pregnant women would be unwilling to be confined in Cumberland Street, and satirical remarks were heard about “possible ideas of probable inmates, who may prefer a detached site.”

Mr. Stallworthy supported the Faculty. He believed that London Street would cost £800 a year more to maintain, and Cumberland Street was selected, but in the end neither was used. It is said that the Minister was at this time ready to grant the necessary money, but owing to these disagreements the chance was let slip; the financial stringency increased, and the money was not forthcoming when it was at last required.

There was, indeed, a long delay before the Government would even guarantee the subsidy on the Obstetrical Society's fund, but in September, 1930, they agreed to pay £10,000, and also interest on the sum not yet voted, so that the promised income was secure.

There was also delay in advertising the Chair. Dr. Sydney Allen, a former surgeon on the Dunedin Hospital staff, had visited the Continent of Europe and been greatly impressed with the obstetric practice in Holland and Denmark, and he strongly urged the Council to appoint one of those nationals. Mr. Stallworthy also insisted that application forms should be circulated in those countries. However, no one of outstanding distinction from either of them entered for the Chair, which was advertised in *The Lancet*, *The British Medical Journal*, *The Times*, *The Scotsman*, and *The Irish Times*. And so matters stood at the end of 1930.

Mr. John Clegg advised that he had left a sum of money, after life interests had expired, to the University Council upon trust to found a scholarship for research in Medicine. Mrs. Margaret Urie left the residue of her estate in trust for a research fund, to be called after her son, who had died of cancer, “The John Urie Memorial Fund,” for research in cancer. The bequest amounted to a little more than £1,000.

Accommodation was provided in the School for research under the Cancer Campaign. Dr. Andrew Begg was given a laboratory and an office in the Physiology Department as Research Fellow for study of the extracellular cause of cancer, of immunity to cancer, of the effect of radium on normal and malignant tissues, and of the macrophage reaction.

The Health Department paid £350 for goitre research, and £250 for animal upkeep, but indicated that it wished to terminate this grant. Further, the department proposed to stop its grant of £600 a year to the Pathology and Bacteriology Departments; the Council of course protested, and a number of alternatives were proposed. It was a period of cheese paring, doubtless inevitable, and it was even proposed to cut down the resident tutors, but fortunately this was not done.

Dr. James Young made another generous gift of books, which were valued at something over £20. Sir Lindo Ferguson pointed out the increasing congestion in the library, and the need for more bays in the recently opened second room. Dr. Hogg showed that the library had grown from 2,000 to 11,000 volumes in seven years, and drew attention to the connections established with other libraries. His salary was lower than those of the librarians in the other special institutions, such as Massey College and the Cawthron Institute. Mr. Robert Hay had bequeathed £1,000 to the library, on which Sir Lindo hoped for a subsidy.

In an address to the Dunedin Chamber of Commerce on the subject of the small Government grants available to the Medical School Sir Lindo showed that when he became Dean the only endowment which the School possessed was the £2,000 given by Mr. Wolf Harris for Physiology, but now, in 1930, it owned £100,000.

In this year, 1930, Mrs. E. N. Chapman was appointed Assistant Pathologist, and Dr. N. L. Edson became second assistant in Physiology. Dr. Duncan Cook, the Clinical Pathologist, resigned, having joined the Health Department; Dr. E. F. Fowler took his place, and Dr. M. N. Watt took Dr. Fowler's. Dr. Gribben resigned from Seaclyff, and was succeeded as Lecturer in Mental Diseases by Dr. T. W. G. Childs. Dr. Durward indicated his impending resignation; he had decided to make Anatomy his profession, and was then negotiating for an appointment in London.

It was decided to grant honours in the M.B., Ch.B. examination. To gain honours students must have made an average of 66 per cent. of the total in all examinations, from the Intermediate onwards, with no mark below 60 per cent.

In 1931 the Chair of Obstetrics and Gynæcology was filled. The Selection Committee made a short list of three candidates, and finally recommended Dr. Joseph Bernard Dawson, M.D. (Lond.), F.R.C.S. (Eng.). Dr. Dawson was educated at Birmingham University and St. Bartholomew's Hospital. He had done research work under Sir Arthur Keith, he had held appointments at Chelsea Hospital for Women and the City of London Lying-in Hospital, and he had been honorary obstetric officer at the Queen's Hospital, Birmingham. He had served at a C.C.S. during the war with the R.A.M.C., and at the time of his election he was assistant at the Adelaide (South Australia) Gynæcological and Maternity Hospital, and Tutor in Obstetrics at the

University, where he had initiated the ante-natal and post-natal clinics. He was also a student of and writer upon the History of Medicine.

Dr. S. W. Hogg, the librarian, resigned, having been appointed secretary to the B.M.A., New Zealand Branch. The library post was advertised at £200 a year, less cut; there were 27 entries, and Dr. W. J. Mullin, an old Otago graduate who had retired from practice and was a great lover of books, was elected.

Dr. Mullin, the new librarian, was greatly interested in historical works, and arranged that a room, known as "The Students' Library," should be made into an historical section, and in it the Monro Collection was housed. The students asked to have bays and shelves fitted up in this room, but later protested against its loss. It had been used much more as a common room than a library, but now there were large common rooms for both men and women in the new building, where a little later tea and other refreshments could be obtained. The historical section became a reading room for students, who also had access to the staff library.

The library grant was reduced by £100. Sir Lindo Ferguson presented Crocker's *Atlas of Skin Diseases* in two volumes, and Dr. Macdonald gave Ziemssen's *Cyclopaedia of the Practice of Medicine* (17 volumes), besides other works. The Dean reported that £2,000 was expected for the library from the Hay bequest.

Dr. Durward resigned and went to London to work under Professor Elliott Smith at University College. Dr. C. C. Anderson resigned from the X-ray Department, and was succeeded by Dr. Marjory Barclay, an Otago graduate, for diagnostic work, who maintained a very high standard and gave the greatest assistance to the clinical staff. Dr. Charles de Monchaux, a graduate of Sydney University, was appointed for therapeutic work in Radiology and was joint lecturer with Dr. Barclay.

Dr. Izod Bennett, Dean of the Middlesex Hospital Medical School, pointed out that the New Zealand scholarship there had proved useless, and suggested that the Dean of the Otago School should nominate a student to work in the Bland Sutton Institute of Pathology or the Cortauld Institute of Biochemistry for six months as assistant at £3 3s. a week, with possible reappointment. The student might also serve as a clinical assistant in a department at the Hospital. Dr. C. J. C. Britton received this appointment, after which he had a grant for research at the Middlesex Hospital, and became joint author of a well-known book on Diseases of the Blood.* He was given a year's leave from the Otago Bacteriological Department, where he was to have been employed later, but on his return to New Zealand he took a better paid post at Christchurch. The Dean took occasion to remark that after six years' expensive training and three or four years' post-graduate work such a man was offered £300 a year, which was less than an unqualified technician received; a charwoman received £100 a year.

* Whitby, L. E. H., and Britton, C. J. C., "Diseases of the Blood," London, Churchill, 1935.

Dr. N. L. Edson was elected Travelling Scholar, Dr. Helen Dougall Lady King Scholar, and Dr. D. R. L. Stevenson the first Auckland Scholar in Obstetrics. J. E. Lovelock was elected Rhodes Scholar, his career at Oxford and later, chiefly in athletics, was very remarkable.

Miss Emily Johnston, daughter of the late Hon. J. Johnston, M.L.C., left £10,000 to the University of New Zealand for medical research, which was of no interest to that body, and the matter was referred to Sir Lindo, who recommended that the will should be modified so as to leave the money to the University of Otago. Mrs. Louisa Miller left £300 for research on Rheumatoid Arthritis.

Dr. Carmalt Jones was made President of the Section of Medicine at the Australasian Medical Congress to be held at Perth, Western Australia. The meeting, however, was abandoned owing to the prevailing financial conditions.

Dr. Hercus and his students were engaged to examine pupils at the King Edward Technical College, Dunedin, for which payment was made, and the fees received were devoted to the Public Health Museum at the Medical School.

Rather as a gesture to the International Student Service, a Bantu student from South Africa was admitted to the School without payment of fees, but not without protest from the Director of Education, who thought that natives of the Pacific should be first considered. He was hard working, but on more than one occasion failed to satisfy the examiners. The experiment was unfortunate, since he returned to his own country without a qualification and with a distinct sense of grievance.

Dr. Hercus was advised that his Goitre Research worker would be paid up to the end of March, 1932, when a report would be required. He reported investigations in this subject on: (1) Soil Analysis; (2) Seasonal Variations in Pigs' Thyroids; (3) Rabbit Goitre; (4) Linolenic Acid; (5) Tadpole Metamorphosis; (6) Anæsthesia and Iodine Circulation; (7) the Thyroid Enzyme.

In this connection it should be stated that goitre, "Guttur Tumidum," enlargement of the thyroid gland in the neck, is endemic in New Zealand, and a number of recruits were rejected for it in the 1914-18 War. The incidence of the condition varied rather widely in different districts in New Zealand. Among goitrous patients a certain proportion suffer from "Toxic Goitre," or "Graves' Disease," a serious condition, and there is a risk of cretinism occurring among children in any goitrous population. It had long been known that iodine was involved in the metabolism of the thyroid gland.

On his return to New Zealand in 1920, after some years' absence, Dr. Hercus joined the School Medical Service in Canterbury, and noticed a great difference in the incidence of goitre among school children in different places. For instance, the number in the Christchurch schools was high, while at Lyttelton, on the harbour, it was much lower. It was believed that the water supply in Lyttelton was

slightly contaminated with sea water, and so contained an added trace of iodine. It occurred to Hercus that this could have no importance in inland districts, and that the incidence of goitre might depend on the amount of iodine in the *soil* in different localities. He instituted an elaborate research on the iodine content of different soils throughout the country, in collaboration with Dr. Noel Benson, Professor of Geology at Otago (afterwards F.R.S.), and Mr. Carter, of the Chemistry Department. The results were very interesting and demonstrated an inverse ratio between the incidence of goitre among the school children and the amount of iodine in the soil in different districts—the more iodine there is in the soil the less goitre there is among the school children. The amount of iodine required for health is extremely minute, and enough is obtained by adding a trace of potassium iodide to the salt used at table and in cooking, four parts per thousand make a sufficient amount. Since such “iodised salt” has come into common use the incidence of goitre in the population has greatly declined.

The Goitre Research was somehow continued, and Mr. H. D. Purves succeeded Mr. H. A. A. Aitken as chemist.

The Faculty of Medicine supported a project for the appointment of a professional dietitian at the Hospital, who should be responsible to the Medical Superintendent. It also supported the Home Science Faculty in a proposal to set up a training school for dietitians at the Hospital. A dietitian was in time appointed, but there was no School of Dietitians.

In 1932 Dr. Childs left Seacliff, and was succeeded by Dr. H. D. Hayes as Lecturer in Mental Diseases. These numerous changes were unsatisfactory for students, and the Dean protested against them to the Department, which, however, had no power to alter them.

Dr. Marshall Macdonald joined the War Pensions Department in Wellington and resigned his seat on the University Council and his post of Physician to the Hospital, to which he was made Honorary Consulting Physician. His appointment in charge of nervous and mental cases was not filled.

Dr. Riley resigned after twenty years as lecturer and two years as professor. He was appointed Honorary Consulting Gynæcologist to the Hospital, but died within a few months of his appointment. Dr. Riley was very highly esteemed by his students, to whom he was known as “Father,” a title which is not given for nothing. A remark not infrequently to be heard was, “If you want to see results, you stick to Father.” He was a profoundly religious man, though quite without parade, and he was never afraid to uphold his convictions. There was an occasion when he was on an expedition to the West Coast with a party of men, and he was riding behind all the others. His horse slipped at a place where the track was cut out of the steep side of a gorge, and both went over. Riley was caught on a bush close to the edge, where he could just reach the path and struggle up;

his horse was never seen again. He never failed, when telling this story, to give thanks where he thought it was due.

The bush country was where Dr. Riley really felt at home. He owned a large sheep run in the Lake Hawea district, which he hoped was going to keep him in his old age, but in this he was disappointed, as others have seen. He had a profound objection to the disfigurement of the landscape by hoardings along the railway line, which is Government property, and on one occasion he led the members of his house party with axes and crowbars to fall upon the advertisements of shirts and cosmetics. The police got wind of it, and when the case was tried the Magistrate's Court was filled with students as nothing in Medical Jurisprudence had ever caused it to be filled before.

Dr. Riley bequeathed to the department some 63 volumes on his subjects and some specimens of obsolete obstetrical instruments.

Dr. Dawson took charge of his department. He arranged to attend St. Helens, but without displacing Dr. Emily Siedeberg-McKinnon, the medical officer. Redroofs also came into service again; for some time women students had been admitted there, and now men also were allowed to attend.

Dr. Dawson presented his report on foreign schools to the Health Department, and he also presented one to the University Council on the conditions under which he was expected to teach obstetrics, which makes queer reading. He had forty students, and he had access to fourteen maternity beds, and those were distributed in three separate hospitals, and even this number was only made up by the courtesy of the authorities of St. Helens and Redroofs. On one occasion he had three patients in labour at the same time, of whom one was in the labour room, one in the bathroom, and one in the bed of a convalescent patient who was turned out for the purpose. He described these conditions succinctly as "unsatisfactory, subversive of the interests of patients, damaging to the reputation of the institution, and impossible from the point of view of instruction."

However, it was not easy to improve matters. The promised subsidy on the fund for the Obstetric Chair was not fully paid, and Drs. Ritchie, North, and Gerald Fitzgerald had to be asked to continue their work at reduced salaries, which they did. No money was forthcoming from the Government for the maternity hospital, and a deputation from the Council, the Board, and the Obstetrical Society visited Wellington; in fact, three deputations waited on Ministers within a fortnight with the same object, the women's societies pressing hard. The Dean found himself in violent collision with the Minister of Finance, the Rt. Hon. J. G. Coates, on account of the requirements of the General Medical Council for the teaching of Midwifery, which could not be fulfilled.

The original estimate for the proposed hospital had been £50,000, but now a new site was selected in Castle Street, which is parallel with Cumberland Street and one block further east; the site there "backs on" the Nurses' Home in Cumberland Street. The new plan was for

a building to contain 24 beds and to cost £27,500, not much more than half the original estimate. The Hospital Board was to buy the site for £2,750, the Dunedin Savings Bank gave £1,000, and the Minister of Employment £3,000. Things did not go forward smoothly, and there was continual argument with the Government over details, the economy of having one kitchen for both hospitals, and the like.

In the following year Dr. Dawson again pointed to the shortage of cases and the difficulties in administration, and pressed for a single institution. Finally, after much negotiation, the Government granted £20,000, the Dunedin Savings Bank raised its gift to £6,000, the Batchelor Hospital was to be sold for £1,500, and the Hospital Board found £2,500, a total of £30,000.

Dr. Dawson reported on his first year's experience in Obstetrics and Gynæcology. There had been 479 obstetric cases, with no deaths, and 471 gynæcological cases, with six deaths. He condemned the Batchelor Hospital very thoroughly. He had treated 324 cases in 14 beds in twelve months. Later he reported on his first 1,000 cases, which included no deaths among mothers.

In this year there was remarkably high commendation of the work of J. A. Stallworthy, Obstetric Scholar, from the Medical Superintendent of the Women's Hospital in Melbourne. Dr. Stallworthy afterwards joined the Nuffield Institute at Oxford in the same specialty.

CHAPTER XIX

1930 — 1939 (Continued)

RETIREMENT OF SIR LINDO FERGUSON DR. HERCUS, DEAN MATERNITY HOSPITAL CHAIR OF MEDICINE

THE question of limitation of numbers had again become urgent. Sir Lindo pointed out that the School had been designed for 50 students per annum; there were now 154 in one class in Physiology, which was attended by the second and third-year students, with a dozen Home Science girls added. The question had even arisen of using a neighbouring church schoolroom. There were more than 80 students in the second year, and the next year's entry was likely to be larger. The Dean doubted if more than fifty students really suitable for the profession would be found in any one year, and he thought the balance was probably made up of persons with brains of poor quality. He suggested taking the best fifty in the Intermediate Examination and excluding the remainder; also, anyone who failed twice in the first professional examination should be dismissed. The crowding was even more seriously felt in the years of clinical study at the Hospital. In periods of slump, as at the time then present, boys entered professions rather than business. There had also been a world-wide rush into medicine after the last war—in New Zealand 20 students had entered in 1914, and 80 in 1920. The cry of overcrowding of the profession had then arisen, and the entries had fallen off, with a consequent shortage in the output of doctors six years later; these fluctuations were unsatisfactory to everyone. The Faculty passed a resolution in this sense. It was decided that medical students should register as such after passing the Intermediate Examination.

The library drew £316 from the general library fund, and this was supplemented from the Medical School Library Special Account, the capital of which was now about £2,300, with an income of about £125. Dr. Newlands presented Tarnici's *Midwifery* and an old obstetric instrument.

Some modifications were made in the regulations for the Ch.M. degree. Candidates must have been qualified for three years and have spent two years in surgical appointments in a hospital or hospitals of at least 100 beds; they must present a thesis and pass an examination of two parts, one in the principles of surgery and the other in a special subject, with a choice of Gynæcology, Orthopædics, Surgery of

the Abdomen, of the Eye, or of the Ear, Nose, and Throat, each to include the history of the subject.

Mr. Gordon Bell delivered the second George Adlington Syme Oration before the Royal Australasian College of Surgeons on "Hospital Problems and Surgical Education."

Sir Louis Barnett, speaking at Ashburton, pressed for the continuance of honorary surgeons at the hospitals, so as not to limit surgical skill and experience to one man in any district.

Dr. G. R. Stoneham was Obstetrical Scholar and Dr. Wyn Irwin was Lady King Scholar.

The Chancellor of the University, Sir Thomas Kay Sidey, died during the year, and was succeeded by the Vice-Chancellor, Mr. W. J. Morrell, Rector of the Boys' High School.

In 1934 a Primary Examination for the Fellowship of the Royal College of Surgeons of England was held at Otago by Dr. G. A. Buckmaster, of St. George's Hospital, in Physiology, and by Mr. William Wright, of the London Hospital, in Anatomy. Twenty-six candidates entered; thirteen passed and two withdrew. In the same year Dr. Russell Fraser, an Otago graduate, won the Hallett Prize at the Primary Examination held in London.

The Royal Australasian College of Surgeons met in Dunedin during the year, and was granted permission to use the Medical School buildings.

Dr. Stanley Batchelor, having completed his sixtieth year, resigned his appointment as surgeon to the Hospital.

Dr. Carmalt Jones was President of the B.M.A., New Zealand Branch, at a meeting which was held in 1935 at the Medical School.

At this meeting the Otago graduates presented an address to Sir Lindo Ferguson and made a donation to the Dean's Fund, which was thereafter to be known as "The Ferguson Fund."

Sir Lindo had served for fifty years on the staff of the School, and he was now appointed Director, at a salary of £300 a year, and was asked to continue as Professor of Ophthalmology, but he was relieved of the lectures, which were henceforth given by Dr. W. E. Carswell. Dr. K. A. Ross became Lecturer on Diseases of the Ear, Nose, and Throat. In 1935 Sir Lindo was made M.D., *honoris causa*, of the University of Melbourne when the British Medical Association held its meeting in that city.

Dr. Carmalt Jones was elected Chairman of the Professorial Board, and was the first medical man in that appointment since Dr. Malcolm resigned some twenty years before.

It was perhaps a sign of the times that a considerable demand was made for cinematograph films, for the display of which a projector was available, as aids to teaching. Dr. Dawson was much interested, and obtained a well-known obstetric film, produced by Dr. De Lee, of Chicago, for £150. This was paid for out of his professional consulting fees. A Dutch film on malaria was bought for some £125, of which three-fifths was obtained from the Dean's Fund.

The Hon. Dr. W. E. Collins, C.M.G., M.L.C., left £250 to the School, to be used at the discretion of the Dean. Dr. Newlands gave Barbour's *Atlas of the Anatomy of Labour* to the Obstetric Department, a work historically valuable.

In this year the Labour Party came into power in New Zealand, with a large majority, and it is perhaps significant that the professorial (and other) salaries were at once increased by 5 per cent., and in the following year by $7\frac{1}{2}$ per cent., though it is also fair to say that the world-wide "slump" had by that time come to an end.

It has been recounted in an earlier chapter how the original building on the Hospital site was erected for an exhibition held in 1866, and how modern wards were put up round it from time to time. The old building was still standing and in use in 1934, and in this year it was at last decided to pull it down and replace it by a modern block containing the administrative offices, the Casualty Department, wards and a theatre for the Ophthalmic surgeons, and for the Ear, Nose, and Throat specialists, a ward for cases which required special metabolic investigation and treatment, chiefly goitre and diabetes, and wards for mental cases. In this year the building contract was let.

A "Cancer Clinic" was held every week in the Hospital. The staff was represented and there was a Registrar of the cases. Results were shown and all practitioners were admitted.

The Nazi regime was by this time in force in Germany, and its discrimination against Jews was beginning to be apparent. In this year a German Jew, who had qualified in Germany in Dentistry and in Medicine, applied for admission to practise in New Zealand. Foreigners had been admitted to the University before then, Dr. Ulrich, for instance, had been a valued member of the staff, and there was no real objection to this gentleman's admission. It was decided that he must undertake a year's clinical work at the Hospital and pass the final examination. After this he would be entitled to practise *in New Zealand only*, and he would hold no license to practise in England or elsewhere. He passed at the end of a year's study. This example was followed by so many people as to create a serious problem for the School at a time when it was seeking to reduce the entry of its own nationals.

Dr. Malcolm was again in trouble with his large numbers and declared his need for more demonstrators. Dr. Fogg resigned, and the post of senior assistant in physiology was advertised at £550 rising to £650. Dr. Muriel Bell, who was then in London, accepted the post, under some pressure. Dr. Drennan reported to the Council that it was very difficult to get the younger physiologists to go so far from the centre of things physiological, as they feared that they would thus be out of the running for posts in Great Britain. There was no suitable candidate on the Biochemical side, and the Dean raised the question of inviting Dr. N. L. Edson, then at Cambridge, to come back to the School. Edson, who became lecturer in Biochemistry, had had a distinguished career; he was M.B., Ch.B. and

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B.Med.Sc., N.Z. and Travelling Scholar of his year, he was Ph.D., Cantab., and had been a Beit Memorial Fellow.

A serious effort was now made to deal with the increasing numbers of students. Sir Lindo produced the following figures for successive years:—

Year	....	....	....	1914	1915	1916	1917	1918	1919	1920	1921	1922
Number of Students	....	....	....	150	133	202	207	211	296	309	350	363
Year	....	....	....	1923	1924	1930	1931	1932	1933	1934		
Number of students	....	....	....	318	281	210	226	258	306	323		

He appended the estimate that "a fully equipped school means £250,000 in buildings, and £30,000 a year to run."

The matter came before the Academic Board and the Senate of the University of New Zealand, and the Senate adopted a recommendation of the Board that the number of entrants to the Medical School should be limited, and that they should be chosen in order of merit as determined by the results of the Intermediate Examination.

With 100 candidates, and an entry of fifty to sixty, the examination became competitive, and it was clear that intending candidates had to be warned of this. The University Council approved the plan, but there was considerable negotiation with the Senate as to the technique of limitation. The Executive Committee of the Senate appointed a sub-committee of the Vice-Chancellor (Professor T. Hunter), the Treasurer (Mr. F. von Haast), and Dr. Kenneth Mackenzie to discuss the matter with the Otago University Council. This sub-committee reported that limitation was necessary. The clinical difficulties were obvious, but Mr. Mackenzie saw no necessity for a second school. The Senate decided to give credits for the B.Sc. examination to candidates who passed the Intermediate but were refused admission to the Medical School.

It was soon made clear, though not by this sub-committee, that if the entry to Otago was restricted, the question of a second school in Auckland would be raised in Parliament; this was done, but it received little support in the House of Representatives.

The plan approved by the Senate was tried once. It was decided to take 60 students; only 58 passed the Intermediate, and 24 failed. These were free to sit the special examination a few months later, when the two scoring the highest marks were to be taken. This worked out very badly; there was the strongest feeling on the part of several doctors whose sons were unsuccessful candidates, and there was very hostile criticism of the whole proceeding in Parliament, where, with great generosity, it was ascribed to a desire to keep down the numbers for the benefit of the existing doctors. One member indicated that if his *protégé* were rejected, he would appeal to the Government to start a medical school in Auckland.

The position was certainly a difficult one. "Do you mean to say my son can't be a doctor if he wants to?" is an awkward question to answer in the affirmative in a highly democratic community. And

such cases were often hard ones; at Yale and Harvard, and no doubt elsewhere, the authorities strictly limit their numbers and select very highly, but in the United States there are a number of schools with less exacting standards where the rejects of Yale and Harvard can get a good medical education. It is not so in a country with a single national school.

At any rate the Government made it clear that this experiment was not to be repeated. The Dean in his annual report showed that the restriction in numbers had caused much discontent, and that the Senate had sent down a committee to enquire how the limitation in numbers could be dispensed with. This committee had drafted a number of questions on medical education and had conferred with the University Council and the staff. They enquired if the time given to Anatomy and Physiology could be reduced by a term, and if the work done in Bacteriology and Public Health could be reduced in amount; and if all students could take their sixth year away from Dunedin. The same questions were discussed by the Divisions of the B.M.A. of Auckland, Wellington and Christchurch, but the opinions expressed showed much variation. If there was to be a second school, there was by no means complete unanimity of opinion as to its proper site. Auckland had no doubts, but neither had Wellington, which thought the Capital City was the proper place for it.

It was decided that limitation could be avoided without a new school if increased facilities were given for clinical teaching, with an enhanced use of the Out-patient Department and increased teaching strength in the laboratories. Then, "we confidently expect that the School will be able to take any number of students likely to offer for many years"—a too sanguine expectation. To permit this, the Government would have to grant £15,000 to be spent on lecture-theatres and on the Out-patient Department, and would have to co-operate with the Hospital Board to provide another £10,000. The extra staff would cost £3,000 a year.

A little later the Dean argued that 25 was the largest number proper for a clinical class; the three physicians could therefore take altogether 75 students. An increase beyond this would only be practicable by making a fourth unit to work in the Out-patient Department. This might be helped out by clinical work in the vacations. The Obstetric difficulties were obvious. As to the other hospitals, if these were employed, systematic lectures would have to be given there and paid for, with an unavoidable increase in expense.

And so the matter stood. A little later the staff voted £1,500 towards a second lecture theatre at the Hospital, to be paid over when the contract was let. There was still delay in Wellington over the plans for the Maternity Hospital.

In Research, Sir Louis Barnett was active in the matter of Hydatid investigation; he gave £50 to it, the Meat Producers, the Farmers' Union and the Government subscribed, and the total sum raised was about £650. Dr. Hercus appealed for the continuation

of Mr. Purves' services in the Goitre study. His department was also to assist one of the dairy companies in analytical research.

Mr. Brian M. Johns, a former student and at this time Professor of Clinical Surgery in the King Edward VII College of Medicine at Singapore, presented pathological specimens of primary cancer of the liver, a rare condition, with sections and case-history.

Dr. Colquhoun, who left New Zealand in 1920 and went to live in London, lost his wife some years later and paid one or two visits to New Zealand. On the last occasion in 1933 he found himself in failing health and settled down to end his days in Dunedin. He died early in 1935, and bequeathed £2,000 to be funded for the purchase of literature for the Medical School library, and £500 to the Faculty of Medicine for the relief of the deserving poor of the district, or for the use of medical students. Former students subscribed about £100 for a memorial to him, and it was decided to put up a tablet in the Medical School, and to found a "Daniel Colquhoun Memorial Medal" to go, together with a sum of money, to the best student of medicine in the graduating class of each year.

Mrs. Mickle of Christchurch gave £500, the income to be devoted to the "Dr. A. F. J. Mickle Memorial Scholarship" for the B.Med.Sc.

Dr. Malcolm presented a bust of Sir Edward Sharpey Shafer.

Dr. Mullin, the School librarian, reached the age limit for retiring. but the Faculty of Medicine pressed that he should be allowed to continue in his appointment owing to "his peculiar suitability for the work, his love and understanding of books, and his stimulus to students in directing and interesting them in the History of Medicine." Dr. Mullin continued in the library till 1939. It was in 1935 that the room taken over as a book-stack to house the American books was turned into a reading room with bays, tables, chairs and lamps.

Mr. Gordon Bell set up a Board of Examiners in Clinical Surgery consisting of two senior surgeons, the orthopaedic surgeon, and an eye, ear, nose and throat specialist.

In recent years the General Medical Council had sent visitors to inspect medical schools in India and elsewhere, and the Dean suggested that this Council should be invited to make a visitation upon the schools in Australia and New Zealand, both countries to share the expense. In 1939, a considerable time later, the Otago school was visited by Dr. Stuart McDonald of Newcastle-on-Tyne; no doubt he reported to the General Medical Council, but no account of his report was ever received in Dunedin.

The Dean applied to the Hon. Peter Fraser, the Labour Minister of Health and of Education, for help for the School, and in 1936 Mr. Fraser visited the University. A point made by Sir Lindo was that in London the Government grant was £20 for each medical student, but in New Zealand it was £10.

A second examination for the Primary Fellowship of the R.C.S. was held at Otago in 1936 by Dr. A. St. G. J. McC. Huggett (St. Mary's) in Physiology and Mr. C. P. G. Wakeley (King's College)

in Anatomy. Fourteen candidates entered and seven passed; it may be remarked that a "fifty per cent. pass" in this examination is very high.

Mr. J. A. Jenkins resigned his appointment as surgical tutor and second surgical assistant and was succeeded by Dr. Geoffrey Barnett, F.R.C.S., son of Sir Louis. Dr. Pauline Simcock, *née* Witherow, was appointed part-time assistant in Bacteriology and Public Health. Mr. S. L. Wilson became Resident Surgical Tutor in 1935 and resigned in the following year. In 1936 Dr. de Monchaux, the Radio-therapeutist, resigned on appointment to St. Vincent's Hospital, Sydney. His post in Dunedin was very difficult to fill, and one appointment to it turned out distinctly unsatisfactory. Dr. J. D. Cottrell, the Resident Medical Officer and Tutor, resigned and was succeeded by Dr. Raymond Kirk.

Dr. William Newlands resigned in 1936, having reached the age limit. He had been Tutor and Assistant Lecturer in Surgery, Clinical Lecturer in Surgery, and on Dr. Scott's death he had conducted the Department of Anatomy with Dr. Sydney Allen.

In this year Dr. Stanton Hicks, M.Sc., M.B., Ch.B. (N.Z.), Ph.D. (Cantab.) received the honour of knighthood. Dr. Archibald Durward was elected to the Chair of Anatomy at the University of Leeds. Dr. Hercus delivered the Syme Oration, in commemoration of Sir George Syme, before the Royal Australasian College of Surgeons, of which he was elected an Honorary Fellow. The subject of his address was "Preventive Aspects of Surgery."

On the demolition of the old hospital buildings the Faculty of Medicine, in pursuance of the proposed policy to avoid limitation of numbers, pressed for the erection of a lecture theatre large enough to hold 100 students and likely to cost from £3,500 to £4,000, and for a new Out-patient Department of 10,000 square feet, double the size of the existing one, which was to cost £15,000, with side-rooms to cost £600 more. The Cabinet approved the plans for the additional theatre, and the Board of Education granted £8,066 towards its cost. When at last erected, it did not turn out an unqualified success.

The new Block at the Hospital was opened in 1936; the Metabolic Ward was named "Stuart Peters" after an unqualified practitioner who had worked for many years in a small town in the neighbourhood; it was said that he had been a medical student at Home, and had gone out to New Zealand and become assistant to a doctor, a legitimate calling in those days. He had succeeded to the practice, and conducted it in an entirely efficient and ethical manner. The money was donated by his sister.

The Mental Wards were named after Dr. Colquhoun and the Specialist Wards after Sir Lindo Ferguson. An operating theatre was equipped for these wards by Mr. Samuel Saltzmann; the first operation performed there was by Sir Lindo, and it was the last he did in the Hospital, from which he was now retiring after more than fifty years' service.

Sir Lindo was also about to retire from the School, and some question arose upon whose shoulders his mantle should fall. Dr. Fitchett presided over a committee of Dr. Malcolm and the Heads of the Clinical Departments which was set up to advise as to the future Dean. Later on Sir Lindo was asked his opinion as to the Directorship, and he replied that the Director had control of a National School of Medicine, which was associated with the hospitals in the other centres. A big man was required for this post at a large salary, but his time would not be fully occupied unless he were on the staff. He should have opportunities to visit other schools (Sir Lindo had visited forty at his own expense). On the question whether the office should be a rolling or a fixed one, he favoured a fixed one. Sir Lindo was too wise to suggest who should be his successor.

Dr. Hercus was elected Dean by the Faculty of Medicine. He had been thirteen years sub-dean with Sir Lindo, and he had no possible rival; in fact no member of the staff was willing to stand against him. Hercus was a relatively junior man, and there was no young professor who could well have been his sub-dean; it was decided therefore to appoint a "Dean's Associate," a term borrowed from the "Judge's Associate" of the Law Courts, to act in a similar capacity. The title of Director of the School was suspended; the Dean was to be elected for three years, as before, and to be eligible for re-election. Dr. Hercus was also elected to represent the Professorial Board on the University Council in Sir Lindo's place. Dr. Morris Watt became Dean's Associate.

The School was certainly very well administered under the sub-deans of Sir Lindo's time. Not a little of the credit of this is due to the Dean's secretary, Miss G. M. Thomson. Miss Thomson, besides using the ordinary technique of an efficient secretary, was quite imperturbable, never "fussed" by any emergency, could put her hand on any required document or student's record at a moment's notice, and nothing was ever too much trouble to her. She kept the wheels of her department oiled and revolving so smoothly that it was taken as a matter of course. Which it was not.

The Faculty of Medicine was to consist of the Dean (Chairman), the sub-dean (when there was one), the professors, the senior staff of the Hospital, the senior teachers in each advisory committee, the sub-deans of the other hospitals concerned in teaching, the medical superintendent of the Dunedin Hospital and the dean of the Dental Faculty.

Sir Lindo Ferguson retired on 28th February, 1937, and the number of extra diplomas taken by former students, most of them during his deanship, may be noted in this place:—F.R.C.S. (Eng.), 85; F.R.C.S. (Edin.), 109; F.R.C.S.I., 1; M.R.C.P., 40; M.C.O.G., 10; M.D. (N.Z.), 63 (besides two granted by the University of Melbourne); Ch.M. (N.Z.), 6; D.P.H., 28.

The following is from the Chancellor's remarks at a meeting of the University Council on 17th March following:—"Sir Lindo was not an Irishman for nothing, as had been said of the Duke of Wellington. He could be, and had been, a redoubtable opponent, but this had left no wound. He was a man of high and varied intellectual distinction, and his persuasiveness came from a steady envisaging of his aims, and from the fact that he was entirely disinterested. The loss entailed by his resignation will be deeply felt at the Council table. His long and varied experience, his knowledge of overseas universities and medical schools, and his practical grasp of affairs has been of great value to the Council and to the University. His readiness in debate and power of clear and telling expression have been coupled with an unfailing courtesy and a kindly humour which have won the affectionate regard of his fellow councillors . . . what the School owes to his wise leadership and guidance in very critical times is hard indeed to estimate." Sir Lindo was made Professor Emeritis of his subject.

Sir Lindo was presented by his colleagues and students with his portrait painted by Mr. Archibald Nicoll, of Christchurch.

One of Dr. Hercus' first concerns on becoming Dean was to produce a scheme for teaching at the outside hospitals. He proposed that in each of them a Joint Relations Committee should be formed from the Hospital Board, the Hospital Staff and the School Authorities, to arrange finance and teaching. A local sub-dean should be elected. The Hospital Board should permit the members of both its honorary and stipendiary staffs to undertake teaching. There should be a local branch of the Faculty of Medicine, to consist of the senior physicians, surgeons and obstetricians, the pathologist and the clinical lecturers, with two elected members of the staff. These teachers would have no university status, but should have security of tenure. The teaching should be paid for. There should be provision for residence of students either in or near each hospital, their work should be clinical, such as is performed by junior house surgeons. There should be practical demonstrations in all subjects, and there should be access to obstetric cases for students who required them to complete their series. Demonstrations should be given in Pathology and Bacteriology. Clinical lectures should be given at the discretion of the teachers, and case-taking should receive attention.

A little later Dr. Hercus issued a report on the anticipated needs of the School for the next five years. He reiterated all Sir Lindo's remarks on the low pay of the staff, and the consequent difficulty in attracting first-class men. He indicated that the Chair of Medicine would be vacant in 1940. He asked for the buildings south of the old medical school up to the corner of Hanover Street for the building of a Research and Preventive Medicine Block, to contain 7,000 square feet; the total cost was to be £55,000, to include a post-mortem theatre. The ground floor was to cost £13,750, of which the Hospital Board and the City Council were to pay half. A little later some of

these sites came into the market, but the Government would not buy; however, they were bought by the University Council in 1938.

The research then in progress included further studies on the Central Nervous System of Tuatara by W. E. Adams; the Metabolism of Living Tissues (a continuation of his work at Cambridge) by N. L. Edson; the Importance of Cobalt in Anaemia, by Muriel Bell; the Laboratory Diagnosis of Infantile Paralysis; and Goitre. Research was also being conducted in Dr. Hercus' own department for a mercantile firm. In the next year Hydatid Research was taken over by the Medical Research Council, and Mr. E. W. Bennett's whole time was engaged upon it.

The New Zealand Medical Research Council was formed; it was to consist of eight members, two of them from the Faculty of Medicine (Dr. Hercus and Dr. Muriel Bell). This body took over Goitre as well as Hydatid Research and also a projected study of Nutrition. The Medical School had certain facilities for such work, and funds were available from the Duffus Lubecki Scholarship in applied science, the Lady King Scholarship, and the Dunbar, Roberts, Ferguson, Barnett and Marjory McCallum Research Funds.

The Travis bequest of £40,000 for Research into Tuberculosis and Cancer has been mentioned. In 1937 Dr. Hercus proposed the formation of a Department of Medical Research between the Travis bequest and the Medical Research Council. In 1938 Dr. Edson applied for the Travis Research Fellowship, but was willing to carry on his physiology teaching until his successor arrived; later on he gave his time chiefly to research, with four hours a week teaching in physiology. Dr. Edson noted that several valuable pieces of apparatus had been purchased out of the Marjory McCallum Fund, a fact which he thought ought to be brought to the notice of the Medical Research Council. Dr. Walter Griesbach, who had held a Chair in Hamburg, but had left Germany for political reasons, was granted a Research Fellowship, and later became an officer of the Research Council. He was part-time Assistant in Physiology from 1939.

In 1938 Sir Truby King died. His system of Infant Feeding, known as the Plunket System, was widely used in New Zealand, and it possessed very great merits, but it took little cognisance of modern advances in the subject. The Medical Research Council therefore wisely decided to investigate the results of the system, and decided also to increase the value of the Lady King Scholarship to £600 a year for two years, with travelling expenses, the scholar to work under the direction of Dr. Malcolm, Chairman of the Nutrition Committee. At Dr. Hercus' request, this appointment was advertised in Australia and Great Britain. The scholarship was finally granted to Dr. W. E. Henley, the former Rhodes Scholar, and at that time Radcliffe Travelling Fellow of the University of Oxford, who obtained permission from that body to spend his travel year in New Zealand for the purposes stated. It should be remarked that the then Director of the Plunket Society, Dr. Helen Easterfield Deem, a

former Lady King Scholar, achieved a very great deal in bringing the practice of the Society up to date, which must have required an infinity of tact.

In 1937 Dr. Frank Fitchett was elected a Fellow of the Royal College of Physicians of London. Dr. W. S. Roberts, the first Pathologist at the School, died. Dr. Kirk resigned the posts of Resident Medical Officer and Tutor and was succeeded by Dr. Murray McGeorge, M.R.C.P. Dr. North resigned from the Tutorship in Gynæcology, having reached the age limit, and Dr. Arnold Perry, a famous Rugby football player and All Black in his youth, was appointed third tutor in the Obstetric Department. Dr. Marie Buchler, *née* Stringer, was elected Lady King Scholar, and studied the Obstetrical Society's records. Dr. Muriel Bell was made a member of the Board of Health. Dr. Peter Buck (Te Rangi Hiroa), one of the first Maori students, became Curator of the Bishop Museum at Honolulu, and was made an honorary D.Sc. (N.Z.). M. Satyanand, an Indian student from Fiji, was admitted to the Medical School, and qualified in due course.

In 1938 Sir Louis Barnett reported on Hydatid Research, and dealt chiefly with Educational Propaganda, Incidence in New Zealand, Clinical Study and Laboratory Investigation. There was a good deal of correspondence about research at the School, and the estimates for 1939 included £1,000 for Hydatid, £1,250 for Goitre and £2,690 for Nutrition. Dr. Alexander McIlroy investigated Goitre clinically throughout 1938 as Emily Johnston Scholar.

Dr. Murray Falconer, M.B. (N.Z.), F.R.C.S. (Eng.), who had worked at Guy's Hospital, Aberdeen University and the Mayo Clinic, was one of the first two Nuffield Fellows appointed at Oxford. His subject was Neuro-Surgery, one little studied in New Zealand, and the Health Department undertook to find him an appointment therein, if his Nuffield record was satisfactory. In later years he was appointed Neuro-Surgeon for New Zealand, and stationed in Dunedin, where he obtained results of outstanding excellence.

Dr. Russell Fraser was appointed a Rockefeller Fellow in Neurology and Psychiatry, which he went to study in the United States.

Dr. Thomas Gilray, of Napier, left £10,000 in reversion after the death of his wife to found a scholarship in Medicine for one boy and one girl from the Hawkes Bay District. A prospective benefactor desired to leave money for "Mental Research." An "Old Graduate" gave £50 for a prize for some subject in the Medical course. Mr. George Ritchie, of the Union Company and the University Council, obtained the *Marama's* bridge bell for the Marama Hall.

Sir Lindo Ferguson, on his retirement, gave a number of books and periodicals to the library. Mrs. C. Saxby, a daughter of Sir James Hector, gave four volumes of Monro works and a manuscript life of Monro Primus.

On the retirement of Dr. Mullin in 1939 the School had the great good fortune to secure the services of Mr. W. E. Linton, who had

been Assistant Librarian at the National Library of Ireland in Dublin and Deputy Librarian at West Hartlepool, and was at the time Acting Assistant Librarian at Canterbury College. It is, of course, very rare for a library of such pretensions as those of a medical school to be administered by anyone so highly trained.

Although £10,000 of the Government subsidy was still unpaid, Mr. Peter Fraser opened the Maternity Hospital, which was named after Queen Mary, at the end of 1937. St. Helens was turned into a hostel and was occupied by Home Science students, and proved, as old buildings so often do, to be a sink for money to be spent in repairs.

The Queen Mary Maternity Hospital was opened in February, 1938. It was considered in every way satisfactory, except for its inadequate size. It contained only twenty-eight beds, arranged in single, two, three, and four-bedded wards. It had accommodation for the ante-natal clinic, a residency for six students, and a residency for nurses. Kitchen and laundry services were supplied by Dunedin Hospital.

Six students attended the hospital at a time, and stayed till they had delivered twenty-four cases between them. Each delivered four cases, and witnessed twenty. This was the preliminary training for students in their fifth year. In the sixth year they had to conduct sixteen additional deliveries in any accessible maternity hospital. While in residence they received instruction in labour-room technique, which included helping to clean up the room and scrub the floor, and in Infant Hygiene, which included washing the baby. There were also a series of tutorial classes in Obstetrics, with demonstrations on the Phantom, and in the ante-natal and post-natal clinics.

The number of cases delivered in the Queen Mary Hospital was on an average 510 per annum. The total number to June, 1944, was 3,300.

The total maternal mortality, including emergencies, was 2.4 per thousand live births. The mortality among those who had passed through the ante-natal clinic was 1.0 per thousand live births. This account was kindly supplied by Professor Dawson.

The Obstetric scholars, who were elected to improve the local standard of midwifery, appeared not to be returning to New Zealand. Dr. Hercus reported that of nine scholars one had resigned and two had not yet completed their time; of the remainder two were doing post-graduate work, one was with the Nuffield Foundation at Oxford, two had settled in England, and one was in Wellington. This was not what the Obstetrical Society wanted. Specialists were not required, but skilled general practitioners were. The Government was asked to institute obstetric appointments at the smaller hospitals, and Dr. Hercus suggested a higher diploma in the subject. St. Helens Hospital in Christchurch was rebuilt and equipped to take residents and students.

Dr. Dawson asked leave to make a cinematograph film of normal labour, which he ultimately did in technicolour, with the help of Dr.

Dodds, Dean of the Dental Faculty, who was highly expert in this work. The film produced was remarkably successful. Dr. Dawson also published the results of his third thousand confinements. It was found that 57 per cent. more cases were treated at Queen Mary Hospital than had attended St. Helens and the Batchelor, and an increased subsidy was asked for.

Some commercial firms—British Drug House, Eli Lilly, and Glaxo, Ltd.—presented valuable cases of drugs and pharmacological preparations to the Pharmacological Department, and the next year Messrs. Schering Pty. Ltd. gave a diagram illustrating the sex hormones to the Obstetrical Department.

Dr. Fitchett, Dr. Carmalt Jones, and Dr. Williams were all due to retire at the end of 1939. Dr. Fitchett would then be 69, Dr. Carmalt Jones 65, and eligible for reappointment which he did not seek, and Dr. Williams would be 66, and under the rule would have retired earlier, but no one else was available to give instruction in the Diseases of Children, and he had been asked to continue. The University Council was advised of the proposed retirements in order that it might have ample time to decide on future arrangements, and to allow anyone appointed from outside New Zealand to give reasonable notice of the resignation of any post he might be holding.

The Faculty of Medicine advised that a whole-time Professor of Medicine should be appointed, at a salary of £2,000 a year, any fees he might receive for consultations to be paid into his department, and that there should be a Senior Lecturer in Medicine, who should also be Lecturer in Therapeutics, at £800 a year, and part-time Lecturers on Children, at £175, on Psychiatry, at £100, an Assistant Lecturer in Clinical Medicine, at £150, and a second at £25, with £200 for equipment and maintenance. Mr. Fraser made no objection to the professor's salary, and promised to pay the balance above what was received from the Glendining Fund.

In 1938 Dr. Malcolm Brown became Lecturer in Mental Diseases, and Dr. R. T. Hay became his demonstrator.

The sum of £500 was allotted to the staffs of Auckland, Wellington, and Christchurch Hospitals for teaching the sixth year students.

Dr. R. S. Aitken, F.R.C.P. (Lond.), the former Rhodes Scholar, was elected Regius Professor of Medicine at Aberdeen University, which is said to be the oldest medical foundation in Great Britain. Mr. A. E. Porritt, M.Ch. (Oxon.), F.R.C.S. (Eng.), another Rhodes Scholar and Assistant Director of the Surgical Unit at St. Mary's Hospital, London, was appointed Surgeon to His Majesty's Household.

An Australasian College of Physicians had been founded, with headquarters in Sydney. It was to have three vice-presidents, of whom one was always to be in New Zealand. Dr. Carmalt Jones was the first New Zealand vice-president, and Drs. Fitchett, Iverach, Hercus,

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and D'Ath were elected Foundation Fellows. The college was opened in 1938, and several of these members of the staff were present.

The new Dean, Professor Hercus, found a number of extraneous calls on his time. He replaced Sir Lindo Ferguson on the Medical Research Committee, and sat on the National Council for Physical Education. In 1938 he delivered the Graduation Address at the Capping Ceremony at Otago on "The Needs of the University," and was the first medical man to be appointed "Orator." In this year he was invited to visit the United States, Great Britain, and the Continent of Europe for nine months as a guest of the Carnegie Corporation. He was granted leave to accept the invitation, and left New Zealand at the end of the year. Dr. Carmalt Jones was made Acting Dean, with the proper emoluments and the help of Dr. Morris Watt and Dr. Davies. Dr. Watt was now First Assistant to the Professor of Bacteriology and Public Health.

In 1939 Dr. Carmalt Jones was elected to the University Council in place of Dr. Hercus, and he delivered the Graduation Address, which was entitled "An Assay of the University Career."

The Chair of Medicine was advertised, and it was the School's great good fortune that Dr. Hercus was in England at the time, and was able to discuss the appointment and the candidates with people of standing. Considerable insistence was laid by his advisers on the importance of research, and a good output of results of research, in the standing of a medical school. Such output on the clinical side of medicine at Otago had hitherto been quite negligible, and it was desirable to remedy this, if it could be done. A strong selection committee was appointed, on which sat Sir Farquhar Buzzard, Bart., Regius Professor of Medicine in the University of Oxford, Professor F. R. Fraser, of the British Post-graduate School, Hammersmith, and Professor Hercus. Professor L. S. P. Davidson, of Edinburgh University, was invited to sit, but was unable to do so. Sir Thomas Lewis, F.R.S., Dr. T. R. Elliott, F.R.S., and Sir Henry Dale, F.R.S., were also asked for their opinions. Twenty candidates entered, of whom three were foreigners. A short list of four was made, of whom one was a New Zealander, trained at Otago. The committee recommended Dr. Frederick Horace Smirk, who was appointed by the University Council.

Dr. Smirk was M.D. (Manchester), M.R.C.P. (Lond.). At Manchester he had gained the Gold Medal in Medicine; he had held a Beit Memorial Fellowship, and had worked at research at University College Hospital, London, and also in Vienna. At the time of his appointment he was Professor of Pharmacology at the Egyptian University, Cairo. Dr. McGeorge was invited to act as Resident Medical Officer for a third year, in order that Dr. Smirk might have the benefit of his experience. Dr. McGeorge agreed to do so. On their retirement Dr. Fitchett and Dr. Carmalt Jones both received the title of Emeritis Professor.

The principal new problem which arose during the absence of Dr. Hercus was due to a sudden influx of refugee doctors from Central Europe, chiefly German and Austrian Jews, but with some Christians, and at least one Pole. The first refugee, as has been noted, was allowed to qualify for practice in New Zealand by examination after one year's study. The next year two others were admitted on similar terms, and after qualification went into practice in the North Island. A year or two later a fourth applied, and it was decided to tighten up the conditions and so to conform to the practice in Great Britain. He was required to take the last three years of the course, with payment of the corresponding fees, and to pass the second and third professional examinations—that is, all those subsequent to the pre-clinical examination in Anatomy and Physiology. He was only permitted to practise in New Zealand after this, and was not granted a university degree, a restriction of rather doubtful fairness, but it was considered important that foreigners from countries which had no reciprocity with Britain should not receive a qualification which would be registrable in the United Kingdom or the other Dominions. The first of the refugees had visited England, but had there found that he could not obtain admission to the register, and that he was not eligible for membership of the B.M.A.

In 1939 thirteen foreign medical men and women were admitted to New Zealand by the Customs authorities; the Medical School was, naturally, not consulted in this matter. They applied for admission to the School, and ten of them had been recommended to it by the Medical Council by the first of March, the beginning of the Autumn Term, and the three others followed. The situation was a difficult one. These unfortunate people, many of them forced to leave their own countries for political reasons, had come to New Zealand in all good faith, having been informed that they could enter the School and later go into practice. But this influx occurred at a time when the School had been doing its best to reduce the entry of its own nationals, and had had to abandon its efforts on account of the public outcry it had aroused. However, the foreigners were, many of them, very badly off, and common humanity forbade the Medical School authorities to allow members of their own profession to work in woolstores or serve in hotels until such time as they could be admitted to the classes in ones and twos. So all were admitted, and had to take the three-years course. The difficulties were indicated to the Customs authorities, and it was resolved that in future there should never be more than six foreigners admitted in any year, and none in the immediate future. There were, of course, the inevitable "hard cases," and a few were admitted later, till the war stopped all such possibility.

For war was upon us again, and this is not the place for any comment on that unspeakable disaster. Dr. Iverach, who then commanded the O.U.M.C. and had a distinguished record in the last war, offered his services, but the University, doubtless wisely, asked the Government not to accept their teachers for the Forces. It was also decided

UNIVERSITY OF OTAGO MEDICAL SCHOOL

that medical students should not be called up for service, and should act as Hospital residents for six months after qualification before joining the Army.

No doubt medical education in New Zealand was now at the end of an epoch. The passing of a Labour Party measure, the Social Security Act, was certain, and was intended, to introduce great changes in the medical practice in the country, and the appointment of a whole-time professor of medicine, who was selected largely on account of his achievement in and capacity for research, required in themselves a considerable reorientation of ideas. What that reorientation will be will doubtless be determined by the outcome of this world-wide calamity.

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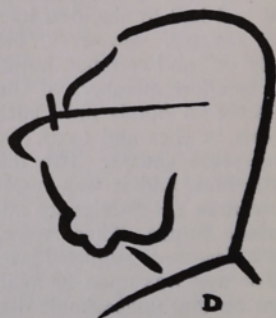
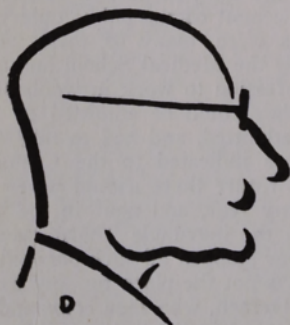
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THE PROFESSORS OF CLINICAL AND SYSTEMATIC MEDICINE

CHAPTER XX

EPILOGUE

THE "history" of the Otago Medical School can be written in a few pages, and has been so written in an article contributed to the *Australian and New Zealand Journal of Surgery* by Sir Louis Barnett.* The present work has been mainly the filling in of names and dates from the University correspondence files, recording that Dr. A. was appointed to such and such a post on 1st January, 1901, that Dr. B. died on 31st December, that so-and-so bequeathed a certain sum of money, that new buildings were opened on a particular date; and it is well that such information should be collected and made available between two covers.

It has not, however, a great deal of human interest, and I desire to put on record the impressions I have received in twenty years' occupation of a Chair in this School. "Let me speak this once in my true person." My own education was of a rigidly conventional type, English private and public schools, ancient university and London hospital, and I came at the fairly mature age of forty-five to this school, which was still in the making.

I have indicated how singularly fortunate the School has been in its early staff, as, indeed, has the University throughout. All its members, of course, have not been equally distinguished; you must have some ordinary people, but there have been many remarkable men here. Scott, Ferguson, and Hercus have made a sequence of men variously gifted—the first for pioneer work, almost the making of bricks without straw; the second for insistence upon modern standards of accommodation and equipment, and that, too, in the face of what appeared insuperable financial difficulties; and the third for the application of science to, and the investigation by research of, the problems of medicine, more especially of preventive medicine. It must have been quite exceptional half a century ago for an embryo school, ten thousand miles from England, to secure men of the professional standing of Colquhoun, of the expert specialist skill of Ferguson, or of the bold surgical enterprise of the elder Batchelor. It would be invidious to mention any of my later colleagues.

Of two of these, however, I must make a personal note. A good deal has been written in the text about Sir Lindo Ferguson as ophthalmic surgeon and as administrator.

It happens that I have lived alone during most of my time in New Zealand, and I was asked by Sir Lindo "to consider his house

* See Appendix III.

as my home," and, indeed, I almost used it as such for many years. While in enjoyment of this great hospitality I found myself in contact with one whom I could consult on professional, business, or personal affairs and from whom I could be sure of a sympathetic hearing, shrewd judgment, and sound advice. This has entailed friendship with a man of keen artistic and literary appreciation and yet of scientific mind, not a common combination. I have found wide knowledge, very clear thought, an accurate memory, and great powers of exposition. And these have been devoted at considerable personal sacrifice to the advancement of the Medical School in this place. There are "little nameless, unremembered acts of kindness" in great number, but, curiously, I have no stories to tell of him.

"Characters" are phenomena more frequently observed among our seniors than our contemporaries. Among the latter, though we often tell tales about one another, they are seldom so picturesque as to be worth recording. However, in his professorial days Frank Fitchett was undoubtedly a "character." A co-professor in the same subject who was his junior by some years, but who was appointed head of the department, would leave a duty undischarged if he did not record Fitchett's unfailing co-operation, his loyalty, and his friendship, which were maintained unvaried throughout twenty years and more. This implies a large measure of generosity, which was shown not only in these abstract matters, but also in the concrete ones of companionship and hospitality. There were fishing expeditions (including the writer's first in this country), when if one were getting rises one might be asked, "What fly are you exhibiting?" There were discussions of poets by the fireside, sometimes at his country house on the coast, and the use of this house was often given on loan.

Professionally, his opinions on certain aspects of disease were quoted in the law courts like judgments, and they were admirably set out.

A family practitioner of what would now be called the "old school," he was a very shrewd judge both of patients' minds and of their bodily afflictions, and he knew of excellent salves for both.

Of the old school again, he "ragged" his students more than is often done nowadays, but they enjoyed it, and always came in the hopes of seeing someone impaled, and quite ready to take the chance of it themselves. His eight o'clock lecture, on the dreary subject of Pharmacology, was always given to a full house. "If you don't know the treatment, give a placebo, and go home and look it up."

At one time the approved method of testing the "plantar response" was with a wooden match. A student, who had the reputation of spending more time in the bar than was good for him, was fumbling in his pockets for a match when Fitchett remarked, "Never mind; a corkscrew will do as well."

He was called upon to make a presentation from the staff to a retiring colleague, not distinguished for his clarity in either the spoken or the written word, though of very adequate proficiency. Fitchett

made the usual tributes to his skill and his influence upon students, and proceeded: "And when I think of the difficulties which he has overcome—the handwriting, of an ataxic spider; the enunciation, of a fibrillating auricle——" The concluding words are obliterated from my memory.

Medicine is, of course, a growing subject, "we get to know more and more about less and less." My father took a four-year course in the late 'seventies; my own, round about 1900, was nominally of five years; and twenty years later six years became statutory in Otago. And for most of those six years students are kept pretty fully occupied. Two years are taken for Anatomy and Physiology; doubtless much that is memorized is never applied and is speedily forgotten, but if these subjects are worth any study at all, and one can hardly imagine the intelligent practice of medicine without them, long periods of time must be spent upon them, or no anatomical or physiological *culture*, "that which remains when all the details are forgotten," will be acquired, and these students certainly know how to find their way about the body, which is, after all, the essential thing.

In the clinical years the staff would, I think, claim that they give sound elementary teaching, both theoretical and clinical, but I do not think that they would claim that the Otago graduate goes out particularly well equipped in any one branch, with the possible exception of Preventive Medicine. This subject has received at the hands of its professor a great deal more than lip service; it has been driven home with the conviction of an able man who believes that he has a message to deliver, which is, that the practice of Preventive Medicine is the essential function of the family doctor. He may have had his disappointments. When war was declared in 1939 and the military camps were organized and largely improvised, the preventive practice seems to have left a good deal to be desired; but that happens to most enthusiasts.

The students are worked very hard in these years, and are driven to attend their courses. In my youth in London the courses were there and you attended or not, it was your own affair; here there is no possibility of evasion. In two years there is teaching of the following subjects and compulsory attendance thereat:—Medicine, surgery, gynæcology, obstetrics, pathology, bacteriology, preventive medicine, diseases of children (including infant feeding), insanity, medical jurisprudence, not to speak of the specialties of the eye, ear, nose, and throat, radiology, and a few more. On any given day, fortunately not every day, a student of my time might attend a lecture at 8 a.m., work in the wards from 9 to 11, attend another lecture at 11, and a third at 12. There would be clinical work from 2 to 4, a lecture at 4, and another at 5. It may be doubted if much of what was provided in the last two hours sank in very far. It is, of course, far more than can be assimilated. "Too much teaching, too little learning." Small wonder that work in the wards, which has to be done without much supervision, is often evaded.

However, very few students who pass the First Professional fail to qualify. The "chronic" of the London Hospitals of my youth does not exist at Otago (probably he has by now been largely eliminated at Home). It is of the students, for whom the University and the School exist, that I wish to write these few lines. I have known them very well, both in class and in athletics, for, though a very moderate performer myself, even at the best of times, I have been closely associated with their clubs for the whole of my time there, more especially those of athletics, harriers, rowing, and tennis, and to a less extent the cricket, boxing, swimming, and ski clubs, though I have had nothing to do with their chief activity, Rugby football.

Their antecedents differ profoundly from my own. It is often stated that there is "only one class in New Zealand," and though this is not strictly true, it is much nearer the truth than any such remark about England would be. With compulsory primary education, numerous free places at the High Schools, and large numbers of scholarships and bursaries, the children of people of very small means can enter the Medical School, and, besides those of professional and business men and well-to-do runholders, there are many, probably more, whose parents are small shopkeepers, artisans, lodging house keepers, and even labourers. The net result is a very refreshing absence of snobbery throughout the student community. That there should be other qualities less attractive is natural enough; one does not look for perfection, and an Englishman can find plenty to criticise (he rarely fails). I desire in these pages to write something of an appreciation.

"Community Spirit," though I rather dislike the term, is probably more evident in the Medical School than elsewhere, since these students are of necessity "whole-time," whereas in other faculties they are only together in the same room during lecture hours.

Naturally, the students have not much "culture," in the European sense; and this has perhaps a certain advantage, in that the ambitious youth devotes himself to the matter in hand without much diversion to right or left, and acquires a very sound knowledge of what he aims at. He certainly works very hard.

Also, what he may lack in domestic culture he makes up in advantages out of doors. Mountain climbing, deerstalking, trout fishing are his almost for the asking, and camping, which is involved in all of them, is familiar to most New Zealanders. The result is that most boys can shear a sheep, often shoe a horse, make a fire and boil the billy, and they acquire a practical ability in the common essentials of life which stands any doctor in very good stead.

In my youth, undergraduates who were short of money, and there were plenty of us, had no means of earning anything in vacations except by taking pupils. You cannot, for instance, compete with your own Scout's boy for an appointment as a holiday waiter at an hotel. In this country it is otherwise, and it is practicable here for students to



SOME MEMBERS OF THE STAFF, 1940

DR. J. B. DAWSON

MR. GORDON BELL

DR. J. MACOLM

DR. F. H. SMIRK

DR. E. F. D'ATH

DR. C. E. HERCUS

DR. W. P. GOWLAND

The sketch of the Professors of Medicine printed on page 252 was drawn by D. Rogers and that of the Members of the Staff by P. Moore. Both were published in the "Digest," and are reprinted by kind permission of the Medical Students' Association.



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work on farms, on sheep stations, on the wharf, in slaughter-houses, in hotels, in quarries, and in a hundred other places. No one boasts about these performances, but they include some rather remarkable achievements. One man, a professional man's son, was cut off after some domestic difference without even the proverbial shilling. He maintained himself for the remainder of his course, which was for some years, by playing an instrument in the cinema orchestras of the period.

Another, later an honorary M.A. at Cambridge, was for a long time an evening waiter in a restaurant. A third used to work in the quarry in vacations, and thereby earned enough to keep him for two out of the three terms in the year.

The most striking, perhaps, is the case of a man who, also after a domestic disturbance, left the school and took to felling bush, at which he became very expert. After a year he had saved £100, and with this he backed himself to win a competition, won it and doubled his money. He repeated this a year later, and acquired sufficient means to complete his course. This seems to approach the heroic.

Taking any class of students, I have found them pleasant to work with, well disciplined, and giving little trouble to manage, and, intellectually, no more than a fair average. There is always a large block of 50 to 60 per cent. papers handed in at any examination, the outstanding performer is rare, as is also the waster. I say this because it is remarkable how well they do after qualification, as the previous chapters of this book show clearly enough. It may be that they are largely of Highland stock, and such proverbially do best when they are out of sight of their own heather hills. (One of my Highland colleagues disputes this.)

At any rate, they certainly make excellent residents, and pick up the requirements in a very few weeks. On a visit to England in 1928 I made enquiry as to how New Zealanders had done in such posts at Home, and the common reply was, "You may send us as many more as you like." They are by way of establishing "runs" at certain hospitals. Brown is house surgeon at, let us say, the "Galen" Hospital in London, and he wants to go for a holiday. He suggests that his friend Smith, also a New Zealander, should do his "locum," and at the next vacancy Smith succeeds to the post. This could not be done unless both Brown and Smith gave satisfaction, and, as it often is done, we may take it that the New Zealanders do good work.

Most of those who go Home do so with the fixed intention of getting a higher diploma, and the results given on a former page indicate their success. To take specific instances which are of interest to myself, the Membership and Fellowship of the Royal College of Physicians of London. There have been just 1,000 students attending my classes in twenty years, all of whom (with negligible exceptions) are now qualified. It is impracticable to "take the membership" for about three years after qualification here, so that at the very most some 700 students of my time would have been eligible for it, had they been able to go Home, and had they wished to try. In passing,

medicine does not make nearly the same appeal to the young graduate as does surgery; far more enter for the surgical fellowships. However, fifty Otago graduates of this time—that is, about 7 per cent. or one in fourteen—have taken the membership of either the London or the Edinburgh College of Physicians, chiefly the former, and of these three have been elected to the fellowship, and one of these delivered the Goulstonian Lectures of the London College, which are given by the “brilliant junior” of the year.

I have compared these figures with the numbers of fellows and members in a list of some 1,600 graduates of a London school of good standing, among whom I find 55, or about 3.5 per cent. The two sets of figures are not strictly comparable, but as far as they go the Otago achievement is rather remarkable.

Again, of these 700 graduates no less than six have attained to professorial chairs, and that all over the world, and no two in the same subject. The chairs are those of Anatomy at Leeds, Physiology at Adelaide, Pathology at Otago, Clinical Surgery at Singapore, Neurology at Harvard, and Medicine at Aberdeen.

Some years ago an article called “The Student in Irons” was published in a leading medical journal in England, written by the dean of a medical school, who was afterwards President of the Royal College of Physicians. It dealt, *inter alia*, with the overloading of the curriculum, and provoked considerable correspondence. Comparing our experience here, where the overloading is extreme, I could not feel that “in irons” was an appropriate description of the students’ state. In the matter of athletics, in the football team, the athletic team, the tennis team there are always a large proportion of medicals, and many times in the last twenty years the University team has won the local trophy in a city much devoted to Rugby football.

Few students of my period have attained any distinction in politics. Dr. D. G. McMillan entered the House of Representatives as Labour member for a Dunedin constituency in 1935, defeating a former Minister of the Crown who had been many years in Parliament. Dr. McMillan was chairman of a number of committees in the House, including that of Health Insurance, and for a short period he was Minister of Marine.

Among the four medical Rhodes Scholars, and athletic distinction is an important item in the qualifications for the scholarship, I have already mentioned a Rugby football blue and two athletic blues. These men all held undergraduate administrative posts of importance. The first was Steward of the Common Room at his college, which is a large and distinguished one, and this post is virtually the undergraduate headship of the college. It was noted in this man’s reports that his influence in college was remarkably good; the same was said of him when a student at his London hospital. Both the others were presidents of the O.U.A.C. I have made a note on the performance of one of them; the other, J. E. Lovelock, had a really remarkable undergraduate career, both athletic and administrative. He was chiefly

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a middle distance runner, but in addition he boxed first string for Oxford in the light-weights through one season, and he also went in for swimming, fencing, and riding in the cavalry. He ran across country and dead-heated for first place in record time. In track running he won the Freshman's mile, and also dead-heated in the mile against Cambridge and won it in a later year. He won the English Championship and made a world's record of 4 min. 7 2-5 sec. at Princeton for a British university team against Americans. Finally, he won the 1,500 metres at the Olympic Games at Berlin.

In administration, he was first honorary secretary and later president of the O.U.A.C., and had a very successful year of office, as after a long series of losses Oxford beat Cambridge in athletics, in the relay races, and across country. He was president of his college Junior Common Room and of its amalgamated clubs (athletic), president of the Blues' Committee, which arranges all university sports fixtures, of Vincent's Club (the principal social club), and of the Committee of Junior Common Room Presidents. If a man of county family, who had been in the Eton XI, had attained to those social distinctions he would have been thought to have had a remarkable career at Oxford; in this case it was attained to by an obscure New Zealander in his third year, who could not have known a dozen people in England when he went up.

I must also mention Merton Hodge, the author of a first play, "The Wind and the Rain," one dealing with medical students, which ran in London for about three years.

Away from home, therefore, it is clear that New Zealanders of my time have displayed between them exceptional intellectual, athletic, and administrative gifts.

I have no more to say, except, quite briefly, that I consider my election to the Chair of Systematic Medicine in the University of Otago as the greatest piece of good fortune which has ever befallen me.

APPENDIX I

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With the Approval of the Chairman of the Editorial Committee.

THE EVOLUTION OF THE DUNEDIN HOSPITAL AND MEDICAL SCHOOL: A BRIEF HISTORY.

By L. E. BARNETT,

Emeritus Professor of Surgery, Otago Medical School.

Eighty years or so ago the picturesque area of bush-clad country at the head of the Otago Harbour (Otakou in Maori language) was practically unknown, except to the native inhabitants and a few adventurous whalers and sealers.

The earliest actual Otago colonists came out in 1848 under the management of the New Zealand Company. They were in the main Scottish people belonging to the recently seceded Free Church, and they brought with them their own minister (the Reverend Thomas Burns, a nephew of the poet), and a planned determination to foster the religious and the educational ideals of their homeland.

They tackled their pioneering difficulties with marvellous courage and enterprise, and by the year 1861, with the aid of the later-coming immigrants, Dunedin had grown to be a town of some three thousand inhabitants, with extensive hospital accommodation consisting of a ramshackle collection of buildings in the Octagon, where the back part of the Town Hall now stands.

In 1861 began the dramatic Otago gold rush, and many thousands of gold seekers, traders and adventurers streamed into Dunedin from California, Australia and elsewhere on their way to the El Dorado of Gabriel's Gully and other alluvial fields situated sixty or seventy miles inland.

Dunedin, in an incredibly short space of time, increased its ordinary population to sixteen thousand, and became the largest and most important town in New Zealand. Shiploads of transients awaiting and preparing for their transport to the gold diggings and camped in barracks, tents and huts, swelled the crowded population to thirty thousand or more. Sanitation was awful, as can easily be imagined, accidents and bloody fights were numerous, and the hospital had to find room for over one hundred and fifty patients, not counting the forty or fifty mental patients who were also housed there.

Dr. Edward Hulme was the medical officer in charge, and in that capacity he served the hospital faithfully and well from the year of his arrival in New Zealand (1856) until his death in 1876. Hulme, in his student days, was dresser to Sir Charles Bell at Middlesex Hospital, and he also learned surgery from Sir Astley Cooper, Cline, Liston, Velpeau and others. He won the Jacksonian Prize in 1848 for an essay on asphyxia. Before coming out to New Zealand he practised for some years in Exeter. Hulme was evidently highly thought of in England by the Royal College of Surgeons, which body accorded him a fellowship without examination in 1866.

By 1864 Dunedin had made encouraging progress, and in the early part of that year an ambitious and very successful exhibition of industry and art was organized and housed in a large and imposing brick building with towers and clock and various wooden annexes, all specially erected for the purpose on the present hospital grounds at a cost of £18,000.

The moving spirit in this venture and the Secretary of Committee was Dr. Alfred Eccles, who had come out to New Zealand at the time of the gold-rush in 1861.

APPENDIX I

Alfred Eccles was a "Bart's" man and a close friend of Sir James Paget, and did so well in his surgical work that he was elected in 1845 amongst the first chartered Fellows of the English College. He practised for ten years in Dunedin, and was one of the most, if not the most, useful and progressive citizens of his time. When the exhibition was over, Eccles, with his customary energy and foresight, persuaded the authorities not to use the buildings for a market, as was the original intention, but to convert them into a commodious and much needed hospital to replace the overcrowded and unsuitable institution in Moray Place.

Accordingly, towards the end of the year 1866 Dr. Hulme transferred 123 of his patients to their new location, and from this beginning the Dunedin Hospital as we now know it has evolved. The rather attractive looking central block is the only part of the original exhibition buildings still standing, and this also having outlived its usefulness, is now to be pulled down and will give place to a modern structure.

In 1867 Hulme had the assistance of a resident medical officer, Dr. Yates, and the services of an honorary visiting staff consisting of Dr. T. M. Hocken (the historian) and Dr. R. Burns. Later Dr. Alexander replaced Dr. Burns.

In 1872 the antiseptic treatment of wounds by carbolic acid according to the teaching of Lister was introduced at the Dunedin Hospital, and the circumstances were so unusual as to merit record.

A young member of the well-known family of the Fultons, while working at a flax-scutching mill, had his left arm drawn into the machinery and a very severe compound comminuted fracture resulted. The patient was taken to the hospital and was there visited by a close friend of the Fultons, Dr. Duncan Macgregor, Professor of Mental Science at the newly established University of Otago. Macgregor, although devoted to the study of philosophy, had studied medicine at Edinburgh and obtained his M.B., C.M. degree there. He had seen Lister at work, and realized the immense value of his researches and antiseptic technique. In Fulton's case he visualized the possibility of saving the arm by the employment of the Listerian methods. He pleaded with the hospital doctors to give this new technique a chance before deciding on amputation, and offered to carry out the details of the treatment with his own hands. So earnest were his arguments and so liberal-minded were the hospital officers, that Macgregor, though not on the medical staff and not even in medical practice, was given charge of the case. The arm was saved, though it took nine months to heal completely and the elbow remained permanently ankylosed. Nevertheless, Fulton was afterwards able to play cricket and tennis and play them well, and he lived to a good old age.

Gradually the old order of things has given place to the new. The milestones of surgical progress have been passed one by one until the stage of the modern hospital has been reached with its extensive aggregation of ward pavilions, theatre blocks, laboratories, radiology and specialist departments, nurses' home, auxiliary institutions, and all the attendant paraphernalia and organization.

Dr. W. S. Roberts, who is now retired from practice, but who was closely concerned with the fortunes of the hospital and Medical School in their earliest years as resident surgeon and as teacher of pathology, gives the following personal reminiscences:—

When, in August, 1878, I succeeded Dr. Tighe (who had died of phthisis) and commenced duties as Resident Surgeon in the Dunedin Hospital, it was a single four square building which had been adapted from what was originally built in 1864 as an exhibition. At that time the conditions were primitive, even for those days. There were six male wards, two female wards, and two small rooms, one male and one female, for venereal cases. There was also a wooden annex for chronic and incurable cases (males), and a small maternity ward with six beds presided over by a matron. The wards were not specially differentiated into medical and surgical cases, the cases being more or less mixed. The nursing staff

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consisted of one male warder for each male ward, and one female nurse for each female ward, and one male night warder and one female night nurse. None of these had received any previous hospital or sickroom training. There was a tin shed situated in the grounds in which lived and died three Chinese lepers. The honorary medical staff consisted of three surgeons, Drs. F. C. Batchelor, H. W. Maunsell and Wm. Brown. The physicians were Drs. de Zouche, Borrowes and Blair. There were no specialists. The operating room was also the casualty room, with wooden table and ordinary wash-hand basins. It was heated by steam. The out-patient department was situated in the wooden annex. This annex was also used as a drying place for the laundry. No special operating costume was used, but the frock coat covered with blood splashes, which at no distant date it was the custom to use, was abandoned; the operator merely removed his coat and tucked up his shirt sleeves. Operations were confined to external parts only. The abdomen was never opened. Appendicitis was unknown, and when present was called typhilitis. There were no attempts at asepsis or antisepsis beyond the use of carbolic lotion and, a little later, carbolic spray. Suppuration was usual and healing by first intention was considered a triumph. Arteries were dealt with by torsion, or were seized by ordinary forceps and tied with silken ligatures, which were left long and kept hanging outside the wound, to be removed later. Drainage tubes were used. Sutures were either silver wire, silkworm gut or horsehair. Esmarch's elastic bandage was frequently used on extremities. Dressings consisted of wet carbolic lint, tow and diachylon plaster. The infectivity of phthisis was not recognized; such patients occupied the general medical wards and no precautions were taken. Typhoid cases were frequent and also cases of *delirium tremens*. Operating instruments were merely washed in hot water after use and kept in a wooden cupboard.

Amongst the students attending hospital in these early days was Dr. Wm. John Mullin, retired from practice and now Medical Librarian to the Otago School.

Dr. Mullin's recollections will usefully supplement those of Dr. Roberts.

I started work in the hospital as a dresser in 1885. My impression of the Dunedin Hospital at this time—nearly fifty years ago—is that, though the building was perhaps ill-adapted for a hospital and the arrangements such as we now would think primitive, the surgical and medical practice was remarkably up to date for such a small and remote centre. We were in the full tide of the carbolic era—all instruments were soaked in one in 20 carbolic solution, sponges were left in it all night and carbolic sprays charged the atmosphere of the operating room with clouds of steam and carbolic acid. The operators were cleanly men who washed their hands well with soap and hot water before dipping them in the ritual carbolic solution. There was no such thing as operating in an old blood-stained frock coat, though I understand that at least one eminent Edinburgh surgeon did so in 1885.

The operating room was certainly a weak spot in the system. It served also as a casualty room for minor surgical cases. Students congregated there to dress casualty cases and wait for their surgeons and physicians. A big bunch of horsehair sutures hung on the gas bracket, open to the airs of heaven and to any dust that might come with them. If anyone wished to suture a wound he plucked a sufficient number of horsehairs from the bunch and put them to soak for a few minutes in the inevitable one in 20 carbolic solution. An up-to-date operating theatre was built in 1888. In '86 or '87 I remember Dr. Batchelor operating in an empty ward because of his distrust of the old operating room. The surgeons who impressed me most were Drs. Maunsell and Batchelor. They were both remarkably able men. Between 1885 and 1890 the Dunedin surgeons had got over their awe of the peritoneum and opened the abdomen freely when

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it was required; but I never heard the term "appendicitis" used till after I was qualified, nor was I, as a student, aware that some surgeons in Europe had started to remove the appendix by operation in cases of perityphlitis. I never heard of "adenoids" till after my final examination. In the early 'nineties I heard of "post-nasal growths" and remember seeing an operation for their removal in 1892.

In the late 'eighties tonsils were removed in the Hospital by Macenzie's guillotine without anæsthesia, the patient sitting in a chair.

Dr. Lindo Ferguson's ophthalmic department was always busy and operations were frequent—cataract extractions, needlings, and iridectomies *et cetera*.

Two operations in 1885 and 1886 still remain vividly in my memory: Dr. Maunsell removing an enormous fibro-myomatous uterus and beaming on the eighteen and one-quarter pound tumour afterwards, through his very concave glasses; Dr. Batchelor making an exploratory laparotomy and finding a large and very putrid extrauterine foetus of some months' growth. Both these patients lived and did well afterwards.

Amputations were not common, but resections of joints were done fairly often.

During this period the attendants in the male wards were "handy men"—ex-policemen, ex-asylum attendants, and others who were not robust enough to work with pick and shovel. William Dryburgh, the hall-porter, an ex-naval man, was a great character in his way. He prided himself on being one of the sailors who carried Florence Nightingale on the stretcher to the transport at Scutari when she was stricken with fever. He died in 1902 after thirty-eight years' faithful service, and kept a careful diary in a large illiterate handwriting, with notes of all admissions, deaths, *post mortem* examinations, and operations. He actually, for a time, did the technical part of the *post mortem* examinations himself and passed catheters when necessary.

Typhoid cases were treated in the general wards—so were consumptives. The physicians did not really approve of this last, but there was no other place for them to go. The first sanatorium came years after, and was a private affair run by a Dunedin doctor.

THE UNIVERSITY OF OTAGO AND THE MEDICAL SCHOOL.

The Province of Otago established a University at Dunedin as soon as the population justified this aspiration of the early settlers, and by 1871, long before any other town in New Zealand had thought of such a thing, arts classes were in full swing, with an attendance of seventy or eighty students. The building used for the first few years as a university is that large and rather ornate structure of the wedding-cake type of architecture situated in the very centre of the town and now known as the Stock Exchange and previously as the Colonial Bank. It was originally built for a post office, and the clock that usefully adorns its tower was removed from the exhibition building in 1864 when this became the hospital, and a very inferior one was substituted which has never merited confidence. The progress of the University speedily revealed the shortcomings of this adapted building, and in 1880 the present specially erected block of buildings in stone and brick on the banks of the Water of Leith became the academic centre for the study of the arts and sciences.

Additional buildings had soon to be erected in the University grounds to accommodate the requirements of Medical, Dental, and Mining Schools, and later it was found expedient to provide entirely new homes for both the Medical and Dental Schools in the immediate vicinity of the Hospital in King Street.

The first student of the Otago University to enrol was Sir Robert Stout, one of New Zealand's most eminent statesmen, and the father of Duncan and Robert Stout, who are both Fellows of the Royal Australasian College of Sur-

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geons. The first to graduate in arts was W. A. Williamson, in 1874, and, as in that year the Otago University became affiliated as a college to the newly formed University of New Zealand, Williamson, who is still living, represents its one and only graduate. All Otago graduates from this time on obtained their diplomas from the University of New Zealand, which was then established as the examining body for the whole colony.

Medical classes were contemplated from the first, but there was some natural hesitation and some actual opposition to be overcome, and it was not until 1875 that the first lectures in chemistry (Jas. Gow Black, M.A., D.Sc.), zoology (Fred. K. W. Hutton, F.R.S.), and anatomy (Millen Coughtrey, M.B., C.M., Edin.) were given, and the Hospital opened its doors for the clinical instruction of medical students. Dunedin Hospital at this time had 190 beds, and there were 72 others at the Benevolent Institution where indigent and chronic and senile patients were housed.

The next largest hospital in New Zealand at that time was Auckland, with 77 beds. (To-day Dunedin Hospital has about 300 beds and Auckland more than twice as many.)

The beginnings of the Medical School were not at all encouraging, and there were great difficulties in getting any sort of recognition by university and college councils in Great Britain.

Dr. M. Coughtrey, who had come out to New Zealand in 1874, and had been appointed Lecturer on Anatomy the following year, had but one student (the late Dr. Charles Low, of Invercargill), and was so dissatisfied with the prospects of success that he resigned his teaching appointment and went into private practice in Dunedin. The University Council in 1877 appointed Dr. J. H. Scott as Professor of Anatomy and Lecturer on Physiology, and from this time the Medical School began to feel its feet, and in a few years, under Scott's wise leadership, became firmly established.

John Halliday Scott, M.D. (Edin.), M.R.C.S. (Eng.), was a Senior Demonstrator in Anatomy under Professor Sir Wm. Turner at Edinburgh University, and twenty-six years of age when he received his Dunedin appointment. (D. J. Cunningham, a junior demonstrator, who later succeeded Turner as professor, was also a candidate for the position.) Scott's first class, held in the year 1878, consisted of the following five men: W. J. Will, F. G. Westenra, Herbt. MacAndrew, J. A. J. Murray, and J. O. Closs, and of these the only survivor is Dr. Murray, now living at Lindfield, New South Wales.

Scott proved an ideal teacher as well as a capable organizer, and was, in 1890, made Dean of the newly instituted Medical Faculty, a position he held to the time of his death in 1914. No man, with the exception of his successor in the deanship of the Faculty of Medicine, Sir Lindo Ferguson, has exerted so marked an influence in the progress of the School, and all old pupils speak of him with gratitude and affection.

In 1878 Dr. Wm. Brown was appointed Lecturer in Surgery, and other classes also were instituted at the Medical School, enabling it to reach a standard that justified Edinburgh University in recognizing the first two years of the course provided in New Zealand. Dr. Brown taught surgery at the Medical School and at the Dunedin Hospital for thirteen years, and taught it well on sound and cautious lines. He took a special interest in the welfare of children, and was chiefly responsible for the establishment of the children's wards in 1899.

D. Colquhoun, M.D. (London), F.R.C.P., now retired, was appointed Lecturer and later Professor of Medicine in 1883. He did much to improve the nursing system at the Hospital, and it was due to him that the old time warders who looked after the male patients and whose work was good only in parts, were replaced by the modern type of trained female nurses. Dr. Colquhoun, however, says that his most useful contribution to hospital progress was the definite partition of hospital patients and staff into the two main groups, medical and surgical. Formerly, a go-as-you-please arrangement prevailed, and medical patients might be treated by surgeons and operations performed by physicians. He himself did operations on occasion, including a nephro-lithotomy that ended well.

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Dr. Ferdinand Campion Batchelor (whose son is F. Stanley Batchelor, now Senior Surgeon of the Dunedin Hospital) was appointed Lecturer in Obstetrics and Gynaecology in 1883, and quickly made and justly earned a great reputation for abdominal surgery. He published his first series of 100 laparotomies as far back as 1891. He was a man of striking figure and dynamic personality, and he worked incessantly for progress. By his efforts, which were backed up by the report of a Royal Commission in 1890, and by generous public contributions of money, new surgical wards were built and the nursing system was greatly improved. Dr. Batchelor will be well remembered by many of the older practitioners as the President of the Intercolonial Medical Congress held in Dunedin in 1896. He died in 1917 after a particularly trying year of war service in Egypt.

In 1884 Henry Lindo Ferguson, C.M.G., M.A., M.D., F.R.C.S.I., joined the Hospital staff as Ophthalmic Surgeon, and in 1886 became the University Lecturer and later Professor in Ophthalmology. Now, after fifty years of devoted and most valuable service, he still holds these positions, and has been Dean of the Medical Faculty since 1914. It is mainly owing to his efforts that the new Medical School buildings opposite to the Hospital were established, and that the progress and prestige of the School have reached their present gratifying position. The medical course has been maintained at a standard comparable with that of schools of the highest repute in other parts of the British Empire, and this fact has been duly appreciated by the New Zealand people, for of the 1,460 doctors on the New Zealand Register, 50 per cent. have New Zealand qualifications and a large number have taken a partial course at the Dunedin School. Sir Lindo Ferguson received the honour of knighthood in 1924.

In 1889 Henry Widenham Maunsell was the Lecturer on Surgery. He was a bold and original surgeon, and his method of performing intestinal resection, first published in *The American Journal of the Medical Sciences*, March, 1892, was described and approved in all the leading textbooks. He used to say that the inside-out technique which is the feature in this ingenious operation was suggested to him by the method he saw his wife employing when fastening the sleeve of a dress to the rest of the garment.

Maunsell also originated a flap method of amputating the tongue and a new technique for cleft palate operation in which he used woodcarver's tools when reconstructing the bony defect in the hard palate. He left New Zealand in 1891, hoping to establish a surgical practice in London, but death from an acute illness some two years later brought his brilliant career to an untimely end.

In the year 1896 a contribution of some note dealing with the operation of partial thyroidectomy for exophthalmic goitre was made by one of the Dunedin Hospital surgeons, Dr. J. O. Closs, who, it will be remembered, was one of the first medical students of the Otago School. He published in the "Transactions of the Intercolonial Medical Congress," 1896, page 160, a record of four cases in which he had operated, and although one of them ended fatally, Closs showed that surgical intervention was in certain circumstances fully justified.

The author's (L. E. Barnett's) long connexion with the School has been, for the most part, ordinary, but one or two points might have some historical interest. He has been in turn a patient, a medical student, a physician, and a surgeon to the Dunedin Hospital, and his son is now one of the assistant surgeons.

As a very small child attending the old Stone School he suffered a dislocation of his right elbow and received appropriate first-aid at the Dunedin Hospital at the hands of Dr. Hulme.

In 1883 and 1884 he was a medical student at Dunedin, and received instruction in anatomy and physiology from Professor J. H. Scott, in botany and zoology from Professor T. Jeffrey Parker, in chemistry from Professor Jas. Black, in surgery from Dr. Wm. Brown, in clinical surgery from the last-mentioned and others on the Hospital staff, including Dr. W. S. Roberts, the resident medical officer, in ophthalmology from Dr. Lindo Ferguson, and in dispensing from Dr. John Brown.

In 1891 Barnett lectured on surgery and was one of the Hospital surgeons as *locum tenens* for Dr. H. W. Maunsell. In 1892 he lectured on medicine and was

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one of the Hospital physicians as *locum tenens* for Dr. D. Colquhoun. In 1894 he succeeded Dr. Wm. Brown as Lecturer on Surgery, and was given his professorship in 1906; and in 1925 retired at the age of sixty, after thirty-three years of service in the Medical School and Hospital. He was the first New Zealander to obtain the English fellowship by examination (1890); the first to visit the Mayo Clinic (1904); and the first to wear rubber gloves and gauze mask as a routine in operative work in New Zealand (1905).

The first of the Otago students to graduate in medicine at the Otago Medical School was Wm. Ledingham Christie, of Warepa. This was in the year 1887. Christie afterwards practised in England and in the East Indies, and died at sea some years ago. Since his time 869 others have graduated as M.B.,Ch.B. (N.Z.), 56 have obtained the M.D. degree and seven the Ch.M. (N.Z.), and of the 73 Fellows of the Royal College of Surgeons of England residing in New Zealand 50 have been students at the Otago Medical School.

APPENDIX II

THE ST. HELENS HOSPITALS.

The following information was kindly supplied by an officer of the Health Department:—

"I think you will find the answer as to why St. Helens Hospitals were not originally open to medical students in the Midwifery Act, 1904, Clauses 5 and 6. These specify that one or more 'State maternity hospitals shall be established where pupil nurses can . . . be carefully instructed in all duties required for the welfare of the mother and infants during and immediately after child birth.'

"It is therefore evident that these hospitals having been established for the one specific purpose, that purpose could not be permitted to be defeated by any action of the Department, and as all the maternity cases available for the training of midwives were required for that purpose, to admit students would have defeated the object for which the hospitals were established.

"I would call your attention to the fact that at that time a very considerable number of the poorer women were attended by midwives without doctors and where a doctor was in attendance the midwife acted as a maternity nurse. Furthermore, it was not until 1925 that the training and registration of maternity nurses was provided for by the establishment of other maternity hospitals under Hospital Boards. Consequently it does not appear to have been an unreasonable decision that medical students could not be admitted to St. Helens Hospitals either in Dunedin or elsewhere until these were available.

"In 1929 other Maternity Hospitals besides St. Helens having been established and having undertaken the training of maternity nurses it was found possible to cease training midwives in Dunedin and to train only medical students and maternity nurses in exactly the same way as is carried on now in its successor, Queen Mary Hospital.

"As many medical students for which there are cases available are admitted to the other St. Helens Hospitals, the only restriction to their number being that enough material for the continuation of training of midwives, for which these hospitals were established, must be kept for that purpose."

APPENDIX III

SCHOLARSHIPS, MEDALS AND PRIZES

BATCHELOR MEMORIAL MEDAL

1917	Jenkins, J. A.	1930	Stallworthy, J. A.
1918	Cottrell, A. J.	1931	Stoneham, G. R.
1919	Budd, H. M.	1932	Cable, J. V.
1920	Graham, R. S. A.	1933	Riley, P. W. S.
1921	Bevan Brown, M.	1934	Hawksworth, W.
1922	Burns, C. R.	1935	Grieve, B. W.
1923	Aitken, R. S.		Platts, W. M.
1924	Fisher, Mollie	1936	Alexander, H. B.
1925	Axford, M.	1937	Manchester, W. M.
1926	Isaac, C. W.	1938	Borrie, J.
	Rogers, L. S.	1939	Marsh, A. H.
1927	Barrett, H. C.	1940	Hallwright, W. W.
	Mackay, S. B.	1941	Hamlin, R. H. J.
1928	Chisholm, F. R.	1942	Cox, L. W.
1929	Pacey, H. K.		

WM. LEDINGHAM CHRISTIE MEDAL IN APPLIED ANATOMY

1922	Kingston, G. R.	1933	Rutter, A. G.
1923	Macalister, Gladys M.	1934	Adams, W. E.
1924	Axford, M.	1935	Alexander, H. B.
1925	Flett, R. L.	1936	Manchester, W. M.
1926	Cook, A. B.	1937	Stallworthy, K. R.
1927	Hindenach, J. C. R.	1938	Sandel, Jean M.
1928	Morris, S. B.	1939	Davidson, W. G.
1929	Edson, N.	1940	Gatman, M. W. A.
1930	Fraser, R. T. C.	1941	Lothian, K. R.
1931	Cable, J. V.	1942	Lindsay, J. S. B.
1932	Falconer, M. A.		

COLQUHOUN MEDAL

1936	Stewart, D. T.	1940	Hallwright, W. W.
1937	McNamara, K. N.	1941	Hamlin, R. H. J.
1938	Stallworthy, K. R.	1942	Lothian, K. R.
1939	Sandel, Jean M.		

FOWLER SCHOLARSHIP

1927	Britton, C. J. C.		
1928	Murray, R. R.		
1929	Howie, A. T.		
1930			
1931	Mulinder, E. K.		Small, H. A.
1932	Greig, M. T.		Higbet, W. B.
1933	Belfield, A. C.		Willis, Gertrude
	Riley, C. G.		Willis, J. D.
1934	Alexander, H. B.		McNamara, K. N.
1935	Marshall, A. F.		Stewart, D. T.
1936	Antonoff-Lewis, L. S.		Stallworthy, K. R.
1937	Sandel, Jean M.		Marsh, A. H.
1938	Gash, D. B.		Wishart, P. W.
1939	Garlick, C. H.		
1940	Taine, G. J.		
1941	Thomas, O. L.		Milne, G. A.
1942	Bell, L. G.		Jenkins, T.

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EMILY JOHNSTON SCHOLARSHIP

1935	Stevenson, C. R.	1939	Kirk, G. R.
1937	McIlroy, A.	1942	McGeorge, M.

LADY KING SCHOLARSHIP

1928	Easterfield, Helen	1933	Irwin, B. T. W.
1929	Grater, Vida	1934	Stringer, Marie
1930	Dougall, Helen	1939	Henley, W. E.
1932	Aitken, Pauline		

A. F. J. MICKLE PRIZE

1937	Stallworthy, K. R.	1940	Baird, C. H.
1938	Sandel, Jean M.	1941	Hamlin, Iris M. E.
1939	Gordon, D. A.	1942	Weston, W. J.

MARJORIE McCALLUM MEDAL

1924	Iverach, J. A. D.	1933	Cumming, A. G.
1925	McNickle, L. C.	1934	Rutter, A. G.
1926	Talbot, G. G.	1935	Grieve, B. W.
1927	Rogers, L. S.	1936	Alexander, H. B.
	Cook, A. B.	1937	Wright, J. L.
1928	Mercer, J. O.	1938	Stallworthy, K. R.
1929	Pacey, H. K.	1939	Moller, H. E.
1930	Edson, N. L.	1940	Begg, N. C.
1931	Fraser, R. T. C.	1941	Hallwright, G. P.
1932	Cable, J. V.	1942	Cox, L. W.
1933	Clarke, E. H.		Jacobs, L. A.

SENIOR SCHOLARSHIP IN MEDICINE

1927	Irwin, B. T. W.	1934	Antonoff-Lewis, L. S.
1928	Stallworthy, J. A.	1935	Stallworthy, K. R.
1929	Fraser, R. T. C.	1936	Sandel, Jean M.
	(2nd Prof. exam.)		Nanson, E. M.
	Keenan, R. D.	1937	Davidson, W. G.
	(1st Prof. exam.)	1938	Gatman, M. W. A.
1930	McGill, R. J.	1939	Lothian, K. R.
1931	Rutter, A. G.	1940	Lindsay, J. S. B.
1932	Stewart, D. T.	1941	Berry, L. M.
1933	Alexander, H. B.	1942	Burton, R. F.

NEW ZEALAND GRADUATES' CLINICAL PRIZES

CLINICAL MEDICINE

JUNIOR

1923	McIndoe, A. H.
1924	Read, C. D.
1925	Eppstein, D. N.
1926	Costello, C. D.
1927	Mercer, J. O.
1928	Maxwell, E. V.
	Morris, S. B.
1929	McNickle, H. F.
1930	Todd, W. G.
1931	Cable, J. V.
1932	Falconer, M. A.
1933	Rutter, A. G.

SENIOR

Matheson, N. M.
McNickle, L. C.
Talbot, G. G.
Cook, A. B.
Rogers, L. S. (5-year course)
Mercer, J. O.
Heycock, M. H.
Edson, N. L.
Fraser, R. T. C.
Stenhouse, R. F.
Cumming, A. G.

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1934	Platts, W. M.	Rutter, A. G.
1935	Alexander, H. B.	Riley, C. G.
1936	Marshall, A. F.	Alexander, H. B.
1937	Antonoff-Lewis, L.	Powles, C. P.
1938	Sandel, Jean	Stallworthy, K. R.
1939	Simpson, D. G.	Turner, A. S.
1940	No award	Begg, N. C.
1941	Lothian, K. R.	Hallwright, G. P.
1942	Bergin, J. D.	Cox, L. W.
		Jacobs, L. A.

CLINICAL SURGERY

JUNIOR		SENIOR
1923	Fitzsimmons, J.	McIndoe, A. H.
1924	Talbot, G. G.	Rose, Alice
1925		Talbot G. G.
1926		Burnett, L. M.
1927		Butler, E. E.
		Rogers, L. S. (5 years' course)
1928		Britton, C. J. C.
1929		Main, W. W.
1930		Stallworthy, J. A.
1931		Fraser, R. T. C.
1932		McGeorge, M.
1933		Falconer, M. A.
1934		Hill, N. F. C.
1935		Begg, A. C.
1936		Alexander, H. B.
1937		Manchester, W. M.
1938		Aitken, S. G.
1939		Gilbert, H. H.
1940		Dawson, E. O.
1941		Gatman, M. W. A.
1942		de Lambert, B. M.

NEW ZEALAND RESEARCH SCHOLARSHIP

1910	Budd, H. M.	1914	Hicks, C. S.
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NEW ZEALAND STUDENTS' SCHOLARSHIP (Middlesex Hospital)

1931	Britton, C. J. C.	1935	McGeorge, M.
1933	Fraser, R. T. C.	1937	Manchester, W. M.

LISSIE RATHBONE SCHOLARSHIP

1927	Elder, J. R.	1932	Brookfield, W. M. W.
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ISABELLA SITEMAN SCHOLARSHIP

1932	Hannah, L. G.
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NEW ZEALAND OBSTETRICAL SOCIETY'S SCHOLARSHIP AND AUCKLAND SCHOLARSHIP

1928	Bridge, R. E. (Resigned)	1936	Hawksworth, W.
1929	Chisholm, F. R. (Resigned)	A. 1937	Macfarlane, T. A.
1930	Pacey, H. K.	1938	Grieve, B. W.
A. 1931	Stevenson, D. R. L.	A. 1939	Wright, J. L.
1932	Stallworthy, J. A.	1940	Borrie, J.
A. 1933	Stoneham, G. R.	A. 1941	Marsh, A. H.
1934	Talbot, R. R.	1942	Hamlin, R. H.
A. 1935	Riley, P. W. S.		

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SCOTT MEMORIAL MEDAL

1924	Cook, A. B.	1934	Stanton, Alice
1925	Edson, N. L.	1935	Neale, H. C.
1926	Morris, S. B.	1936	Sandel, Jean M.
1927	Stallworthy, J. A.	1937	Davidson, W. G.
1928	Fraser, R. T. C.	1938	Gresson, C.
1929	Cable, J. V.	1939	Lothian, K. R.
1930	Eaton, O. L.	1940	Lindsay, J. S. B.
1931	Adams, W. E.	1941	Berry, L. M.
1932	Stewart, D. T.	1942	Burton, R. F.
1933	Alexander, H. B.		

GEORGE YOUNG SCHOLARSHIP

1925	Edson, N. L.	1932	Stewart, D. T.
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MEDICAL TRAVELLING SCHOLARSHIP

1909	Johnson, T. W. J.	1927	Cook, A. B.
1910	Watt, M. H.		Rogers, L. S. (5 year course)
1911	Johnston, W. P.	1928	Hindenach, J. C. R.
1912	Julian, T.	1929	Maxwell, E. V.
1913	Sowerby, Wm.	1930	Edson, N. L.
1914	Fulton, R. A. H.	1931	Fraser, R. T. C.
1915	Milne, D. S.	1932	Cable, J. V.
1916	Dowling, Mary F. C.	1933	McGill, R. J.
1917	Jenkins, J. A.	1934	Rutter, A. G.
1918	Cottrell, A. J.	1935	Grieve, W. B.
1919	Bennett, L. A.		Moloney, G. E.
1920	King, A.	1936	Alexander, H. B.
1921	Bevan Brown, M.	1937	Manchester, W. M.
1922	Burns, C. R.	1938	Stallworthy, K. R.
1923	Aitken, R. S.	1939	Sandel, Jean M.
1924	Iverach, J. A. D.	1940	Hallwright, W. W.
1925	Fitzsimons, J.	1941	Gatman, M. W. A.
	Rose, Alice		Hamlin, R. H. J.
1926	Durward, A.	1942	Lothian, K. R.

APPENDIX IV

EARLY STUDENTS

The late Dr. James Fitzgerald, who entered the School in 1885 and practised for many years at Kaitangata and also in Dunedin and served on the University Council, kindly gave the following brief notes of where his contemporaries went into practice.

Date of Entry	Name	Practised at
1876	Chas. Low	Gore.
1877	J. A. J. Murray	Kaiapoi.
	W. J. Will	Green Island; Ashburn Hall (Private Asylum).
1878	H. McAndrew	Asylum Service.
	J. Closs	Dunedin, surgeon to Hospital.
1879	J. Cunninghame	Port Chalmers.
	J. McPherson	Dunedin, a classical scholar, football player and sprinter.
	G. Montgomery, B.A.	Died in Edinburgh.
1880	W. Maclean	Waikaia, football player.
	T. Bell	
	R. C. Strobe	England, cricketer.
	F. W. McKenzie	Wellington, boxer.
1881	J. Brodie	Died in Scotland.
	J. H. Jeffcoat	Dunedin, Hospital staff, v. text.
1882	W. Fleming	Dunedin.
	W. L. Allen	Mosgiel, football player.
	W. L. Christie	Milton, Bristol, Borneo, v. text.
	P. A. Lindsay	Akaroa.
	D. Smith	Dunedin.
	E. J. Roberts	Nelson, South Africa.
1883	L. E. Barnett	Dunedin, v. text.
	E. H. Colbeck	London
	J. Somerville	Napier.
	W. J. Dermer	
	C. Little	North Canterbury, of literary attainments.
	J. Burns	Connected with the poet.
	R. V. Fulton	Dunedin, historian, v. text.
1884	J. C. Palmer	Featherstone.
	F. J. Nicoll	Lawrence
	W. G. Cattan	Outram.
	N. G. Trotter	Riverton, football player.
	W. A. Chapple	England.
	W. J. Mullin	Ashburton, v. text.
	H. C. Barclay	Waimate.
	— Moorhouse	
	— Westenra	Christchurch.
1885	G. A. Copland	Gore.
	W. Hislop	Wellington.
	J. Fitzgerald	Kaitangata and Dunedin, v. text.
	A. Hendry	Invercargill.
1885	J. W. Reid	Wanganui.
	P. R. Cook	Masterton.
	T. G. McKellar	Dunedin.
	W. Butement	
	J. W. Lovegrove	

APPENDIX IV

After this, the year of entry is uncertain, but students joined approximately in this order:—

L. Rolleston	Asylum Service.
E. F. Fooks	Asylum Service.
E. H. Alexander	
S. A. Gibbs	Nelson.
W. F. Bauchop	
C. G. Morice	Wellington.
R. H. Hogg	Invercargill.
W. Fitzgerald	England.
W. Mill	Alexandra.
R. B. Huxtable	
J. F. Menzies	Milton.
W. Elliott	Wellington.
J. C. Smith	
J. Torrance	Bluff.
L. Hardy	England.
G. Baldwin	
M. Campbell	Hawera.
J. A. Campbell	
C. Cantrell	Akaroa.
A. Crosby	
J. A. Fullerton	Invercargill
J. J. Grace	
W. Griffin	London.
W. H. Hargraves	Oamaru.
G. Hodges	Port Chalmers.
G. Home	New Plymouth.
C. Little	North Canterbury.
K. McAdam	Oamaru.
J. A. Nevill	
W. H. Parker	
M. Ross	
J. B. Thompson	Arrowtown

APPENDIX V

ROLL OF HONOUR, OTAGO UNIVERSITY MEDICAL SCHOOL, 1914-18.

Members of the Council, of the teaching staff, and students who left New Zealand for active service.

Lieut.-Col. L. E. Barnett, C.M.G.	Capt. A. Kidd
Lieut.-Col. E. J. O'Neill, C.M.G., D.S.O.	Capt. F. O. MacGibbon
Lieut.-Col. W. Marshall Macdonald, C.B.E.	Capt. W. McAra
Major H. P. Pickerill, C.B.E.	Capt. D. G. McPherson
Capt. S. C. Allen	Capt. A. M. Marshall
Capt. T. Fergus	Capt. J. A. Marshall
Capt. T. Julian	Capt. D. S. Milne
Capt. S. A. Moore	Capt. R. B. P. Monson
Capt. K. Ross	Capt. F. J. Mulholland
	Capt. A. D. Nelson, M.C.
	Capt. H. Pettit
	Capt. O. G. Reid
Lieut.-Col. P. K. Cook	Capt. W. J. Reid
Lieut.-Col. M. Holmes	Capt. G. H. Robertson
Lieut.-Col. J. Hardie Neil, D.S.O.	Capt. W. S. Robertson
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Major F. Cameron	Capt. W. Sowerby
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Major T. R. Ritchie	Capt. F. F. A. Ulrich
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Major H. Short	Capt. W. S. Wallis
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Major A. M. Trotter	Capt. A. D. S. Whyte
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Major R. L. Withers	Capt. W. H. Will
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Capt. R. H. Baxter, M.C.	
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