

SESS. II.—1891.
NEW ZEALAND.

REPORT ON THERMAL ESTABLISHMENTS IN EUROPE.

BY C. MALFROY, ESQ., CUSTODIAN OF THE ROTORUA SANATORIUM.

Presented to both Houses of the General Assembly by Command of His Excellency.

I HAVE the honour to report that, having procured circular letters of recommendation from the French Government, also from the English Embassy in Paris, to the directors of the thermal establishments of France, Switzerland, Germany, Belgium, and England, I visited a good many establishments; but I shall mention only the most important, and principally those which, like Rotorua, are under Government or municipal corporation control.

Vichy (France) is one of the most important thermal stations of France. It has many thermal establishments in the town and district, the principal ones being Government properties, farmed out to the *Compagnie Fermière des Eaux de Vichy*. It is managed on a purely commercial basis. A very great business is done in the extraction of the salts from the waters by evaporation, &c. to make pastilles, and a compound of the different salts is sold for baths, called “Vichy at Home.”

During my stay I heard great complaints (which may or may not be legitimate) that the *Compagnie Fermière* were sacrificing Vichy's interest to their own pecuniary gain, and that it would be much better for the place if the Government would resume control and manage the establishment, the same as is done at Aix-les-Bains.

Aix-les-Bains.—This is the most important thermal establishment of France, if not of the world. The water resembles those of Rotorua in so far that it is slightly sulphurous. There are many bathing-establishments in the town and district, the principal one being the Government establishment, having at its disposal every appliance for hydro-mineral medicament: 1,200 baths, 2,000 douches, and 200 inhalations can be administered daily; and it is said that it treats more actual patients than any other establishment in the world, and amongst them is now inscribed in their Golden Book the name of Her Most Gracious Majesty the Queen of England and Empress of India. I am specially indebted to Mr. C. L. Livet, the director of the establishment, for his kindness and courtesy, and for the very valuable information which he gave me.

Baden-Baden (Germany) possesses several bathing-establishments, the principal, newest, and most complete being the *Friedrichsbad*, justly celebrated for its therapeutic appliances of the latest designs, amongst which is the mechanico-therapeutic establishment, wherein the special gymnastic apparatus of Dr. Zander, of Stockholm is erected, providing active and passive mechanical movements for every joint of the human frame; all these appliances can, with mathematical precision, be regulated to suit the individual case to be treated. This mode of gymnastic exercise seems to be greatly appreciated by those who use it, but it is rather costly to be introduced into a place with small population, such as Rotorua.

Wiesbaden.—This is also a very important bathing-resort. Many tourists and invalids visit the place, but it possesses no special bathing-establishments. The thermal springs are owned by the Government, or Municipality, who provide luxurious drinking fountains and halls (*Trinkhallen*), and supply the different hotels with thermal waters for their respective bathing-places, none of which are of sufficient importance to compare with those of Aix-les-Bains or Baden-Baden.

Aix-la-Chapelle possesses some very valuable mineral springs, the property of the Municipality, who have built several convenient bathing-establishments, which they let or lease at a high rental to responsible tenants, subject to the inspection and supervision of a specially-appointed Government inspector. Four of these establishments being now in the hands of Mr. Dremel, a large hotel-keeper, it enables him, by judiciously dividing them into classes, to afford accommodation to suit the taste and circumstances of all classes of visitors.

Spa (Belgium).—There is a nice little establishment here, the property of the Corporation, and under their immediate management and control. The installation being recent, it is well supplied with all modern balneal and medical gymnastic appliances, and possesses a good reputation throughout Europe.

Bath (England).—Owing to the inclemency of the weather (December) this is the only establishment I visited in England. It was recommended to me because it is the most recent and complete installation in this country, the works being still in progress.

Bath possesses a very large quantity of thermal water, which is under the control of a Bath Committee, appointed by the Corporation, which, until recently, contented itself, like us at Rotorua, with the simplest mode of bathing, immersion being the only treatment given. In 1885 the Bath Committee finding that the science of balneology had made such progress on the Continent that their invalid clients became less and less in number, the medical men of England recommending all patients who could afford it to go to the Continental watering-places, where "massage" and other recent scientific modes of the application of thermal-water treatment had become recognised as a trustworthy and efficient agency in the treatment of many diseases which yield but indifferent results to the action of drugs, they, on the representation of J. G. Douglas Kerr, M.B.C.M., who paid a visit to Aix-les-Bains, and who on his return presented a report to the Bath Committee, took the matter energetically in hand, the result being that the Corporation sent their architect to visit Aix-les-Bains and other Continental establishments, to acquire the technical knowledge necessary to improve their baths; and upon his (the architect's) return a sum of money was procured by way of a loan, and works were at once put in hand; and when I visited Bath the appliances for the application of water in use there were equal to most of those I saw on the Continent, and the Bath Committee think so highly of them that they have brought over some *doucheurs* and *doucheuses* from Aix-les-Bains to train their own attendants into this special form of "massage" treatment; the pulverisators, sprays, &c., for the treatment of diseases of the mouth, throat, nose, ears, and eyes, being procured from the same Paris firm of medical-instrument makers who furnished and installed those in use at Aix-les-Bains.

I was everywhere well received by the directors of the different establishments which I visited, and they were most kind and painstaking in showing and explaining to me the use of the different appliances, apparatus, &c., used in their respective establishments. I took copious notes, and some sketches of anything new likely to be introduced here.

I was also very much interested in the Balneal and Therapeutic Pavilion erected within the Paris Exhibition grounds, where many of the bathing-establishments of France had courts illustrating by means of wax figures the peculiar mode of applying their special mode of treatment, with attendants willing and anxious to give information respecting their use, and physiological effects on patients.

The impression made on me by what I saw and heard in Europe is that by neglecting these special modes of application of our mineral waters we lose the greater part of the benefit to be derived by their use. And the fact that we have proved so successful by simple immersion-baths in so many cases which have come under my personal notice during my three years' residence at Rotorua can only be attributed to the powerful sulphurous and other mineral ingredients which the Rotorua springs contain; and it makes me feel confident that we would have wonderfully good results if the Government took steps to introduce the improved and, I may say, scientific mode of application of mineral water used in Europe.

The great importance and popularity which now attach to the scientific mode of using the water are proved by the fact that at Aix-les-Bains there are appliances to give 2,000 douches and 200 inhalations and pulverisations in the day, whereas they have only appliances to give 1,200 immersion baths of every description.

J. G. Douglas Kerr, M.B.C.M., in a paragraph of his report to the Bath Committee, Bath, speaks in terms which are so applicable to our own case that I cannot do better than to quote them here. He says, "In speaking to a leading London physician on this subject before leaving England, his words, as nearly as I can recall them, were, 'Go straight to Aix-les-Bains: there you will see the best mode of applying thermal treatment in the world. Study it, introduce it at Bath in the same luxurious style in which the immersion-baths are conducted, and you need fear the rivalry of no thermal spa of Europe. Neglect it, and you must in the near future be left behind in the competition for bathing-patients.' At the same time he told me that he could only send one out of twenty rheumatic patients to Bath, because, in his opinion, the others required the massage treatment, for which we had no accommodation. This I believe to be the opinion of most of the leading men in the medical profession, both in London and the provinces. The time has come when thermal treatment, combined with massage and shampooing, will take a prominent place in medical practice in all diseases in which it is applicable; and I feel certain that, if we want to hold our own in the race, and increase our field of usefulness, the Corporation must extend their bathing-establishments in a direction to meet the demand."

This perfect system of special thermal treatment has been the slow development of many years of careful study and experiments, and is the one which universal experience pronounces to be most efficacious.

Beside the ordinary swimming-bath, sitz-bath, family-bath, and single bath, with cold douches, the same as we have here, there are thermal-water douches in the form of jets, sprays, waves, circular sprays, ascending and descending column, bouillon or mineral vapour-bath, vapour-bath for local application, inhaling-room with pulverisators, rooms for the administration of spray and pulverised mineral water for the treatment of diseases of the mouth, throat, nose, ears, and eyes; all of which could be introduced here at no great cost, and all or any of them would tend to relieve the pressure on our present existing bath. It would likewise fill a great want in New Zealand and in the Australian Colonies, and bring this place into repute as the first bathing and therapeutic establishment of the southern Pacific.

With regard to the attendants, *doucheurs* and *doucheuses*: The success or failure of these special treatments greatly depends on the care and skill of the attendants, of which those trained at Aix-les-Bains have the name of being the most proficient, great care being taken to have only well-trained and capable attendants in that establishment. Every attendant undergoes three years' apprenticeship, and has to serve for two years in the position of assistant *doucheur* or *masseur* before receiving a certificate of competency or being allowed to administer

New Zealand and the Australian Colonies to visit our bathing-establishment periodically, and judge for themselves of the capabilities of our waters and of any new appliances in use for utilising them, and thus become more competent to prescribe the special mode of treatment most suitable to their patients' respective cases.

Speaking on this subject, J. G. Douglas Kerr, M.B.C.M., in his report to the Bath Committee heretofore mentioned, says, "The prosperity of every spa is so much in the hands of the medical profession that they (the management of Aix-les-Bains) consider they consult their own interests by this courteous treatment; and the fact speaks for itself that at the present moment there are no less than thirteen medical men undergoing treatment at Aix." This proposal was at once acceded to by the Bath Committee, and now medical men, on presenting their cards to the chairman of the committee, are made welcome to all the privileges of the bathing-establishment free of charge.

The prices for baths vary according to class and accommodation given; and in many places there are first-, second-, and third-class baths. At Aix-les-Bains, simplest bath, 50c.; douche, 3f. At Vichy, simplest bath, 50c.; douche, 3f. 50c. At Enghien, simplest bath, 1f. 25c.; douche, 4f. At Spa (Belgium), simplest bath, 60c.; douche, 4f. 25c. At Baden-Baden (Germany), simplest bath, 1 mark; douche, 3 marks. At Wiesbaden and Aix-la-Chapelle, price irregular, according to the hotel. And at Bath (England), the simplest bath 6d., and douches 3s. 6d. Besides these there are what are called princes' baths and *bains de luxe*, which are charged from 8s. to 10s. each, according to the accommodation and attendance given, as per scale. A small charge is also made in most places for drinking the water—1d. per glass, or about 5s. per month. Another thing which seems generally adopted and much appreciated is to provide heated linen at a regular scale of charge. This could be easily adopted here by heating the linen with our hot-water pipes.

Hoping that the foregoing information may prove interesting and useful, and be the means of drawing the attention of Parliament and of the public to the great importance of the marvellous thermal resources of New Zealand, and that the adoption of some of the suggestions herein contained may eventually prove a source of wealth to the country and of comfort to the human race,

I have, &c.,

Rotorua, 20th February, 1891.

CAMILLE MALFROY.

Approximate Cost of Paper.—Preparation, nil; printing (1,350 copies), £2 8s.

By Authority: GEORGE DIDSBURY, Government Printer, Wellington.—1891.

douches or massages, subject always to stringent rules, and regulations to strictly follow and never depart from the instructions given by the patients' consulting doctor.

To start this special kind of treatment it would be necessary to procure some competent *doucheur* and *doucheuse* to train and instruct some of our local attendants. I spoke to the Director of the Aix-les-Bains establishment to know whether a married couple could be had to come to New Zealand. He informed me that some *doucheurs* and *doucheuses* had been sent from Aix-les-Bains to train and instruct the attendants of the new establishment at Bath, and he said that if such were wanted for New Zealand he would willingly assist in selecting a couple.

The salary paid in France for *doucheur* or *doucheuse* is not very great—from 400fr. to 600fr. (or £16 to £24 sterling) per season of six months; but I was told that they receive a good deal in gratuity from patients beside. They all have some kind of trade or calling which they follow in the dead season, and it is somewhat hard to induce them to leave their home and habits for such a distant country as this.

The introduction of douches and massage would require a large quantity of mineral water under pressure of about 50ft. to have all the advantage of it. This could be procured, and a system of douching arranged at Rotorua, by using the water of the Kuirau, which is equal to about 400,000 gallons in the twenty-four hours. As this, however, is a work of some magnitude, it will require a well-considered and matured plan of the whole proposed scheme to be drafted out and adopted, and afterwards to be carried out year by year as the demand for accommodation increases. In the meantime some improvements can be effected to the steam-bath, the Rachel and Priest Baths, which would greatly improve them and increase the present accommodation, which is being taxed to its full extent. These last improvements I have to some extent explained to Mr. H. A. Gordon, Inspecting Engineer, on his last visit to this place; and if instructed I will draft out plans of the respective works and submit them to you.

In re management of establishment: Most of the thermal establishments of Europe are administered by a *personnel* consisting of a director or manager, one or more inspecting doctors, and a number of officers and attendants according to the importance of the establishment and the number of patients treated. Having procured a copy of the rules and regulations in force at Aix-les-Bains, I hereunder translate a few of them:—

Chapter I.—Clause 1: A director or manager named by the Minister of Commerce is charged (under the supervision of the Prefect) with the direction of the thermal establishment and its dependencies. Clause 2: The director supervises all parts of the service; he sees to the execution of all measures of order and of administration prescribed by the rules and regulations, and consults with the inspecting doctor in all matters relative to the administration of the waters. He directs every person belonging to the service, who is bound to obey him.*

Chapter II.—Clause 3: The inspecting doctor, nominated by the Minister of Commerce, exercises, in a medical point of view, supervision over all parts of the establishment devoted to the administration of the waters and to the treatment of the sick, and on the execution and disposition of the rules and regulations bearing thereon. He directs also, in a medical point of view, the service of the employes attached to the baths, douches, &c. He notifies to the Prefect or Minister all abuses or defects in the service. In case of urgency he will consult with the director upon any immediate action to be taken. He will be assisted in his duty by one or more assistant inspecting doctors, nominated by the Minister. Clause 4: Anything contained in the first paragraph of the preceding article shall not be interpreted so as to restrain the liberty of patients to follow the prescription of their own doctor, or to be accompanied by him if they demand it. Clause 5: Patients are not bound to pay any remuneration to the inspecting doctors when these last do not direct their treatment and do not otherwise give them special advice or care. Clause 6: Inspecting doctors treat gratuitously all indigent persons admitted to the use of the waters. [There is always a hospital and some kind of charitable establishment attached to the baths.] Clauses 7 to 19 deal with the mode of keeping and checking the accounts. Clauses 20 to 36 deal with the distribution and use of tickets for douches, baths, &c., and regulate the mode of admitting patients and bathers. Clauses 37 to 53 deal with the *personnel* of the establishment, and regulate their respective duties. Clause 54 deals with the rate of charge for the different baths, douches, &c., which are divided into two and even three classes, and range from 3fr. for first-class douche and bath to 50c. for the lowest (a simple public piscine bath). Independent of these, there is a rate for a family bath (half-rate granted to certain person under certain well-stipulated conditions); a rate for bath-chair carriers; a rate for extra linen provided (the linen being heated); a rate for special bath out of the ordinary bathing-hours, under medical advice, for patients requiring a number of attendants, complicated apparatus, or affected by contagious or repulsive diseases. Clauses 56 to 67 deal with the free or gratuitous bathing, which is here very liberal. Clauses 68 to 73 deal with the general rules applicable to the good conduct and behaviour of patients, visitors, and the *personnel* of the establishment.

All these rules and regulations, being the result of many years' experience, are well calculated to insure the efficient working and perfect system of checking the accounts and revenue of the establishment, and could be applied profitably to the Rotorua and other Government establishments.

Clause 59 reads, "According to usage in force, French and foreign doctors are admitted gratuitously by justifying their identity by legal documents, or on being presented by a doctor in exercise at Aix." This clause is well worthy of the consideration of the Government, as the granting of the foregoing privilege to all medical men would perhaps induce the medical men of

* This rule of having a non-medical director is generally adopted on the Continent, as it gives more scope and freedom to patients, and to outside medical men to exercise their own judgment in the treatment of each individual case.