

During the year 320,000 trout-ova were distributed in the Rotorua Acclimatization District. A permanent Ranger has been appointed, and commenced his duties in January last. Several convictions for poaching offences have been secured.

I am pleased to report that His Royal Highness the Emperor of Austria again presented the Government with three chamois from his private herd. One of the beasts, however, died on the way to the Dominion and the remaining two are being held in captivity until they are sufficiently acclimatized to be liberated. Eight deer calves were allotted to the Department from the Paraparaumu Game Farm, and were liberated at different points in the Rotorua Acclimatization District.

The trout-fishing has been good, and a large number of oversea sportsmen have visited the Rotorua and Taupo districts, securing excellent results. It is a fairly general opinion that the trout-fishing in Lakes Rotorua and Taupo has improved considerably since last season.

REPORT OF THE BALNEOLOGIST, ROTORUA.

Dr. Wohlmann reports as follows:—

I beg to submit my report for the year ended 31st March, 1914.

In 1912 I was granted twelve months' special leave, and returned to New Zealand in November, 1913. During my absence the establishment was managed by Dr. Scott, the Maori out-patients being attended to by Dr. Baxter. Owing to the smallpox epidemic a considerable portion of Dr. Scott's time was occupied by Public Health duties, and the revenue from the purely balneological side will be seen to have suffered a corresponding diminution. As was only natural, the out-patient "private" practice suffered most, as private practice is largely a personal matter, and cannot be handed intact from one man to another. The strike, too, interfered with the prosperity of the spa, more especially by interfering with the Australian traffic. Since my return, however, the balneological work has been heavier than I have ever known it, and business at the baths has quite returned to its former level.

Owing to long domestic illness, I was unable to see much of the continental health resorts, or to attend the Congress in Berlin, as appointed by the Government; but I took the opportunity of making a prolonged and close investigation of the principal English spas, and of inquiring into the latest methods and apparatus of modern balneology and electro-therapeutics. I had also the opportunity of conferring with many of the leading British and continental balneologists, and am particularly indebted to Dr. Saubermann, who came over especially from Berlin to discuss with me the question of radio-activity in mineral waters. Dr. Saubermann is an acknowledged authority on this subject, and he was good enough to give me much useful information that I could hardly have obtained otherwise, except at the cost of much time and labour.

Comparing the British and New Zealand spas, I could not help being struck by the immense superiority in raw material that we possess in New Zealand, and especially at Rotorua, over the Home spas, and hardly knew whether to be pleased or disappointed to find how little new there was of undoubted value in the way of equipment to be found in the English spas which was yet lacking in Rotorua.

Great improvement has been made, especially at Harrogate, in the way of catering for the amusement and relaxation of visitors, and advertising is more scientifically thorough than it used to be; baths are brighter and more spick and span with metal and tile work than is possible here, where everything is speedily tarnished by potent fumes; but from the point of view of efficiency of medical treatment pure and simple, the establishment at Rotorua has little to fear in comparison with any in the Old Country.

After very careful investigation, and rejecting what was in favour for the moment merely because it was new, I selected several apparatus for treatments which seemed to me to be assured of permanent value, and much of this is now here waiting to be put up during the winter in readiness for next season. The principal forms of treatment selected are: (1.) A universal orthopaedic apparatus for the active or passive movement of any joint. (2.) The Bergonié apparatus for the treatment of obesity, constipation, gout, and various diseases of defective metabolism. (3.) The Plombières douche for the treatment of intestinal toxæmia and the secondary joint diseases arising therefrom. (4.) Certain minor improvements for our existing X-ray apparatus, though I am afraid that nothing short of a complete new and more modern outfit will make this really satisfactory. (5.) I also purchased certain scientific apparatus, notably an electroscope for the measurement of the radio-activity of mineral waters.

I went carefully into the question of the utility of the internal administration of artificially radio-active waters, and after much inquiring, both at various spas and in London, was driven to the conclusion that such water is a valuable adjunct to bath treatment in a great variety of diseases. As the weak point of Rotorua as a spa is its poverty in potable mineral waters, I recommended the purchase of a small plant, suitable for the treatment of about thirty patients a day, at a cost of £250. The initial cost is high owing to the price of radium, but the upkeep is nil, and the material is to all intents and purposes everlasting. The consideration of the purchase of this plant was deferred. My report on the subject and recommendation to the High Commissioner will have been forwarded to you.

Book on Mineral Waters.—Before leaving for England I had written a book giving detailed information about all the known springs and spas of New Zealand, and as this was still incom-