gave an interesting account of them and the trip he had just taken in the "Tutanekai."

THIRD MEETING: *28th August, 1900.*

Mr. G. V. Hudson, President, in the chair.

New Members.—Dr. Fyffe and Mr. J. A. Gilruth.

Papers.—1. "On *Metacrias strategica* at Invercargill," by George Howes; communicated by Mr. G. V. Hudson. (*Transactions*, p. 188.)

Sir James Hector said this was a most interesting paper, and he hoped to hear more from the author.

2. "On the Fog in Wellington on the 19th June last," by H. N. McLeod. (*Transactions*, p. 380.)

Mr. Harding, in referring to the above subject, added some interesting information regarding observations by his father on recent rainbows at Napier.

Mr. Hogben also made some remarks on rainbows.

Sir James Hector had observed peculiar fogs over the Hutt Valley. Sea-fogs were beneficial, but those from the mountains were sometimes injurious to vegetation.

3. "On the Papatu Cave, at Ormondville," by H. N. McLeod. (*Transactions*, p. 343.)

Sir James Hector referred to the probability of finding valuable relics of natural history in newly discovered or little-explored caves of this Island. He said he did not look on the searching for and removal of such relics as vandalism; in fact, he regarded their careful collection as most meritorious.

Mr. Travers mentioned the recent find of moa-bones at Mauriceville. Instead of being carefully preserved, they had apparently been wantonly destroyed—almost pulverised.

Mr. McLeod remarked that in his belief the cave in question, which had not been much disturbed, would be found to be a very valuable one in the direction mentioned.

4. "On Rats and Plague," by Mr. H. C. Field. (*Transactions*, p. 443.)

Sir James Hector remarked that there was something in the periodic seven-year illness, for it had been experienced in America, the animals at these periods suffering from some form of plague.

Mr. Tregear said that if rats died in large numbers every seven years it was a point of great interest and should be investigated; it was not generally known. There was no proof, however, of their having died of plague.

Mr. Harding did not think the paper bore out what it tried to prove.

5. "Notes on late Additions to the Museum," by Sir J. Hector.

New exhibits at the Colonial Museum include a fine specimen of the king penguin, from Macquarie Island; groups

of the orange- and blue-wattled crows, with albinos of both species (*Glaucopis cinereus* and *G. wilsoni*), a specimen of the very rare New Zealand snipe, from the Auckland Islands; a godwit (kuaka), a dabchick, and a bell-bird, from the Auckland Islands; and a diving-petrel, from Antipodes Island.

Explaining the exhibits to the Philosophical Society, Sir James Hector said the bell-birds had in the past ten years greatly diminished—probably because of the spread of the humble-bee, which entered into competition in obtaining honey from flowers. At the Auckland Islands, however, the bell-bird now existed in large numbers. A peculiar feature about the godwit was that every second year it went to Siberia to do its nesting. He urged that every effort should be made to preserve the New Zealand snipe, which was becoming very rare indeed. This bird, he said, was one of the smartest game-birds that could be got. It retained all the characteristics of the English snipe—flew in a zig-zag manner, was difficult to shoot, and afforded capital sport.

FOURTH MEETING: *25th September, 1900.*

Mr. G. V. HUDSON, President, in the chair.

Papers.—1. "On the *Lepidoptera* of Mount Ida District," by Mr. J. H. Lewis; communicated by Mr. G. V. Hudson. (*Transactions*, p. 186.)

Specimens illustrating the paper were exhibited.

Sir James Hector considered this a most useful contribution, which he hoped would be followed by others.

2. "Early Explorations and Colonisation of Western Canada," by Sir James Hector.

ABSTRACT.

Sir James briefly sketched the early history of Canada, formerly a comparatively insignificant portion of the British possessions in that region, and the adjacent country, millions of square miles of which had been chartered to the Hudson Bay Company, who established a line of small fortified trading-centres, and worked the country solely for its furs. Casual adventurers penetrating this region brought back reports of its vast and fertile plains, its favourable climate, and immense undeveloped wealth. The company, on the other hand, represented it as a desolate and frigid waste, valuable only on account of the wild fur-bearing animals it produced. Agitation for the opening of the country led the Home Government to appoint the Palliser Expedition, which started in 1857. The lecturer—then a young man who had just completed his university course—was selected by the University of Edinburgh for the post of naturalist and medical officer to the expedition, and one of his first duties on arriving in Northern America was to nurse his leader through a sharp attack of typhoid. Subsequently, in the occasional absence of the head from the scene of operations, the whole charge and responsibility fell upon Dr. Hector, who had to act many parts—as geologist, naturalist, surveyor, physician, diplomatist (having negotiated a treaty with a native tribe), besides bearing his own share of the "pack" in those parts of the journey where the party carried their belongings and provisions on their backs.

The expedition started from Lake Superior, on which much of the