

the Alaska record there were overlapping records. An electric system of obtaining numerous seismograms simultaneously had been tried, but it was pronounced a failure, as the lower seismograms were not accurate.

The President (Mr. G. V. Hudson) thanked Mr. Hogben for his address, and the thanks were emphasized by the meeting.

3. "Survey: Practical and Precise," by the Hon. G. F. Richardson. (*Transactions*, p. 492.)

4. "Researches into the Action of Fusible Cutouts," by E. G. Brown, A.I.E.E. (*Transactions*, p. 356.)

5. "Note on Vapour-density of Mercury," by Douglas Hector, student in Victoria College; communicated by Professor Easterfield. (*Transactions*, p. 382.)

6. "Embryological Structure of New Zealand *Lepidoptera*," by A. Quail, F.E.S. (*Transactions*, p. 159.)

The following exhibits were laid on the table by Sir J. Hector:—

A great eel, as big as a conger—5 ft. 6 in. in length, and weighing probably over 20 lb.

The big fish, which, as Sir James Hector remarked, would no doubt account for the disappearance of a good many trout, was caught in the Hutt River near Silverstream. It is rare in the scientific sense, though Sir James had no doubt that numerous examples lurked in dark places in the Hutt River. It is known to science as a New Zealand fish, under the name of *Anguilla latirostris*; but, though the British Museum possesses a specimen, this is the only one in any collection in the colony. Four or five species of New Zealand eels required careful study and description, and could give plenty of work to some of our young naturalists.

Sir James Hector gave interesting details of the habits of eels. Their method of reproduction had, he said, long been a mystery, careful examination always failing to detect eggs in the body of the female. It was now known that they retired to the ocean for the breeding-season, and at great depths—under the enormous pressure of some thousand fathoms of water—deposited their eggs. A small, thin, translucent fish, the *Leptocephalus*, had now been proved to be the fry of the conger, and a flood of light had been thrown on the subject. Large eels like this were rarely seen except when streams or ponds were drained. This one got into a backwater, and was killed in somewhat unsportsmanlike fashion with a pitchfork. There was another great fresh-water eel in New Zealand, found in the Waikato, the Buller, and in Lake Wakatipu, but differing from this one in important respects. In that species the jaws were equal, while in this one the lower jaw projected considerably beyond the upper; the Waikato eel was steel-blue, and this one was a brownish-olive above and below.

A pair of skulls, male and female, of a leopard-seal (genus *Stenorhynchus*, species doubtful), from Macquarie Island.

One of the animals, Sir James Hector explained, had suffered the agonies of toothache, one of the tusks showing signs of extensive caries. A curious habit of this species, who dived with difficulty on account of their fat, was to swallow rounded stones for ballast. On dissection their stomachs were usually found loaded with stones.

A supposed true specimen of *Salmo salar* in the smolt stage, taken in the entrance of the Motueka River, Nelson.