

FIFTH MEETING. 18th September, 1880.

Mr. MARTIN CHAPMAN, President, in the Chair.

PAPER.

1. On the "Industries most suitable to New Zealand." by A. K. Newman, M.B.

This was an able lecture on the undeveloped industrial resources of the colony, describing in detail many processes that could be profitably employed by the settlers.

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SIXTH MEETING. 10th October, 1880.

Mr. T. KIRK, F.L.S., in the Chair.

*New Members.*—W. H. Simcox, J. C. Harris.

PAPERS.

1. On "Watershed Districts, by J. R. George, C.E. (*Transactions*, p. 119.)

2. "On the Permanency of Solar and Stellar Heat," by Mr. Martin Chapman. (*Transactions*. p. 97.)

3. "On the genus *Rhynchonella*," by Mr. A. McKay. (*Transactions*, p. 396.)

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SEVENTH MEETING, 4th December, 1880.

Mr. Martin Chapman, President, in the chair.

*New Members.*—Messrs. Noel Barraud, and Gibson.

The President announced that the nomination in October, of Dr. Newman to represent the Society on the "Board of Governors of the New Zealand Institute" for 1881, had resulted in the election of that gentleman.

PAPERS READ.

1. "On a Per-iodide of Lead, also a Carbo-iodide," by W. Skey. (*Transactions*, p. 388.)

This paper described a new salt, a Per-iodide of Lead, and also a new compound salt formed by the combination of carbonic acid with this Per-iodine, which has a striking blue colour similar to that produced by adding iodine to starch, and will prove a very delicate and beautiful test for the detection of minute quantities of carbonic acid.

2. "On the Dimorphism of Magnesia," by W. Skey. (*Transactions*, p. 389.)

In the course of experiments for the detection of gold in sea-water, the author found that magnesia is deposited in a form that absorbs iodine, giving rise to a highly coloured substance, and that the magnesia loses this property on being raised to a high temperature. It is therefore argued that the magnesia is altotropic. Further, that magnesia can be exhausted from ammoniacal solutions by galvanic action, thereby greatly shortening the chemical analysis. These tests combined are also useful in detecting the presence of