

5. On the Minute Structure of the Eye in certain Cymothoidæ. By Frank E. Beddard, Esq., M.A., F.Z.S.
6. On the Mean Height of the Land of the Globe. By John Murray, Esq.
7. The *Chætopoda Sedentaria* of the Firth of Forth. By J. T. Cunningham, Esq., B.A.

Monday, 18th July 1887.

SHERIFF FORBES IRVINE, Vice-President, in the Chair.

The Chairman intimated the foundation by Dr Gunning of the *Victoria Jubilee Prize*, and the conditions of award which have been approved by the Donor, and added that the Prize of One Hundred Guineas from this source had been this year awarded by the Council to Sir William Thomson, for a remarkable series of papers on Hydrokinetics, especially of Waves and Vortices, forming some of the most valuable that have been communicated to the Society.

The following Communications were read :—

1. Laws of Solution. Part II. By W. Durham, Esq.

From the note in my former paper on the above subject it is easy to deduce the following formula, which expresses the relations between the heats of chemical combination and the heats of solution :—

Heat of Combination.	Heat of Combination.	Heat of Neutrality.	Heat of Solution.
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$$\left\{ \begin{array}{l} [\text{M}, \text{X}^2] \\ - [\text{H}^2, \text{X}^2, \text{Aq}] \end{array} \right\} = \left\{ \begin{array}{l} [\text{M}, \text{O}, \text{Aq}] \\ - [\text{H}^2\text{O}] \end{array} \right\} + [\text{MOAq}, \text{H}^2\text{X}^2\text{Aq}] \pm \{ \text{MX}^2, \text{Aq} \mp \}.$$

This formula is perfectly general for chlorides, bromides, iodides, sulphates, and nitrates, and whether the oxides and salts are soluble or insoluble. It shows that the heats of solution pass from negative