

- III. "On the Male, and the Structure, of *Thaumops pellucida*." By R. VON WILLEMÖES-SUHM, Ph.D., H.M.S. 'Challenger.' Communicated by Prof. HUXLEY, Sec. R.S. Received October 24, 1873.

(Abstract.)

This is an addition to the paper on *Thaumops pellucida* by the same author (Proceedings of the Royal Society, vol. xxi. p. 206), containing an account of the male, and some corrections of the description formerly given. The species appears to be widely distributed, and to live at moderate depths, coming to the surface at night.

- IV. "On the Bending of the Ribs in Forced Breathing." By ARTHUR RANSOME, M.D. Communicated by Dr. BURDON SANDERSON, M.D., F.R.S. Received May 15, 1873.

(Abstract.)

In a paper "On the Mechanical Conditions of the Respiratory Movements," read before the Royal Society in November 1872*, the author endeavoured to show that there is a distinct difference in the chord lengths of a sternal rib in the two positions of full inspiration and forced expiration, and that a certain degree of bending of the ribs usually takes place in forced breathing. The measurements on which these conclusions were based were made with a 3-plane stethometer, the performance of which was not sufficiently accurate to satisfy the author, who has accordingly repeated them by the aid of a new instrument, the construction and use of which are described at length in the present communication. The author considers that the new instrument gives fairly accurate results, which fully corroborate the conclusions previously enunciated.

December 18, 1873.

JOSEPH DALTON HOOKER, C.B., President, in the Chair.

Pursuant to notice given at the last Meeting, the President proposed, and Professor Henry John Stephen Smith seconded, the Right Hon. Edward Cardwell, M.P., Secretary of State for War, for election and immediate ballot.

The ballot having been taken, Mr. Cardwell was declared duly elected.

The Presents received were laid on the Table, and thanks ordered for them.

* Proceedings of the Royal Society, November 22, 1872.