PROCEEDINGS

OF THE

ROYAL SOCIETY OF EDINBURGH.

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At the first ordinary meeting of the Society on 7th December, the Makdougall-Brisbane Prize, for the Biennial Period 1866-68, was awarded to Dr Alexander Crum Brown and Dr Thomas Richard Fraser, for their paper on the Connection between Chemical Constitution and Physiological Action.

At the same meeting the Neill Prize, for the Triennial Period 1865-68, was awarded to Dr William Carmichael M'Intosh, for his paper on the British Nemerteans and on some new British Annelids.

Monday, 4th January 1869.

DR LYON PLAYFAIR, C.B., M.P., Vice-President, in the Chair, who said—

It was my painful duty last year to allude to the death of that great philosopher, Sir David Brewster, and within a few months we have now to deplore the loss of another philosopher, also great —I need not say that I allude to Principal Forbes. This Society is intimately identified with his life and labours. Long our Secretary, he did all that was in his power to promote its success. man of science, we are too intimate in this place with his researches to render it necessary that, on the present occasion, I should make a detailed allusion to them. His early and his latest researches were upon heat. He established the polarisation and double refraction of the heat ray, and proved the identity of thermal and lumi-His last published research is upon the conducnous radiations. tion of heat by iron. In this he has established that, like electricity, heat passes more slowly through a bar of elevated

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temperature than through one which is cold. He also showed how the absolute conductivity of a metal for heat might be measured.

But it is probably in connection with his researches on glaciers that Forbes's name is best known to the general public. Memoir on the veined or ribboned structure of Ice was published in our Transactions in December 1841. Reading that memoir with the light of recent researches, we rise profoundly impressed with the accurate observations and clearness of judgment of their As he himself observes in that paper, it is astonishing how little we see until we are taught how to observe. This veined structure of glaciers is intimately connected with their mode of formation, and with the remarkable phenomena which render them so interesting to all investigators; and yet no one observed with the eyes of science this important veined structure until Forbes Even with the new experiments of James Thomson on the lowering of the freezing point of ice under pressure, and of those of his brother, Sir William Thomson, on the rupture produced in a viscous solid by continued shearing, we could scarcely at the present day observe the phenomena more accurately than was done by Forbes twenty-nine years ago, or connect them more lucidly with the occurrence and position of the cracks and crevasses of the glacier.

But this and all his subsequent researches on the motions of glaciers as a viscous mass exhibit the peculiar characteristic of Forbes's mind—scrupulous conscientiousness in his scientific labours, scrupulous conscientiousness in his life as a man.

It is not my duty to say more than I have done; but at the first meeting of the Society which has occurred after his death, I thought it right to allude to our own loss; and I now move that the Society instruct the Council to express to Mrs Forbes and her family our sympathies for their bereavement, and our sense of the loss which science has sustained by the death of this distinguished philosopher.

Professor Jenkin, at the request of the Council, delivered an Address on Cable Testing.