Monday, 17th February 1879.

PROFESSOR KELLAND, President, in the Chair.

The following Communications were read :—

1. On some Physiological Results of Temperature Variation.
By J. B. Haycraft, M.B., C.M. Communicated by Professor Turner.
2. On the Elasticity of the Walls of the Arteries and Veins. By Dr Roy. Communicated by Dr George W. Balfour.
3. Further Note on the Distribution of Temperature under the Ice in Linlithgow Loch. By Mr J. Y. Buchanan.

In continuation of the observations into the condition of the water of frozen lochs, which were communicated to the Society at the meeting of the 20th January 1879, I have been able to repeat the observations in Linlithgow Loch on two separate days, and also to visit Loch Lomond. The observations in Linlithgow Loch were made on the 25th January and 1st February, both times at the same spot, from which the Court House Flagstaff bore N. $150\frac{1}{2}^{\circ}$ E., and the Rickles Island N. $63\frac{1}{2}^{\circ}$ E., the depth being 48 feet. On the 25th January there was a diminution of pressure under the ice, so that when it was pierced the air rushed in with a roaring noise for about a minute, when it stopped, and the water rose in the hole. On the 1st February, on the other hand, the ice was cracking and resounding on all sides, and water rose at once in the hole when the ice was pierced, there being at the same time a considerable escape of air. These two stations have been numbered respectively 6 and 7; they are exactly in the same spot, a few yards distant from that of No. 4. The ice was very decidedly thicker than it had been.