

JOSEPH ALFRED HARDCASTLE.—We greatly regret to have to record the death of this well-known member of the Association, which occurred on 10th November, at the early age of 49 years. Mr. Hardcastle was appointed astronomer at the Armagh Observatory as successor to Dr. Dreyer, only 10 months ago, and his friends hoped and expected that he would be able to utilise to the full, for many years, the opportunities thus afforded him for the prosecution of his favourite studies. But it was not to be so, and the Association has now to mourn the untimely loss of one of its most able members. He joined the Association in 1902, and served on the Council for several years, filling the office of Secretary for five or six Sessions. His contributions to the *Journal* are numerous, and on a variety of

subjects of astronomical interest. Specially memorable are his papers on the Tides, which, without any elaborate mathematical analysis, show clearly the futility of the explanation of the so-called equilibrium theory of the tides, which is (or was) so often to be met with in text-books. As an indefatigable and industrious worker he was an invaluable assistant to the late Mr. Saunder in the laborious operations involved in the measurement of lunar photographs and the determination of selenographic positions from them. He appeared to be always ready and willing to undertake work, however laborious, that was likely to lead to important and interesting results. He was elected a Fellow of the Royal Astronomical Society in 1902, and contributed some papers to the *Monthly Notices*. Mr. Harcastle was, as is generally known, a grandson of the late Sir John F. W. Herschel. His astronomical abilities and tastes are, therefore, an example of the transmission of hereditary talent in a marked degree.