

If you can afford the space I shall be glad to add a few words to the recent communications of Major Lang and Mr. Hughes to NATURE on the occurrence of *Antedon rosaceus* in Torbay.

I do not think *Antedon* has been more abundant than usual during the present year in this locality. An entry in an old note-book reminds me that a chance haul near the Thatcher Rock on July 11, 1871, brought up "plenty of feather stars," and since then during the six years I have dredged in Torbay, *Antedon* has been a very ordinary capture whilst dredging for other objects of interest.

The haul under Berry Head on July 25, alluded to by Major Lang, was undoubtedly an unusually prolific one, but had it not been for the fortunate discovery by Major Lang of the pedunculate form, the mere occurrence of an abundance of the adult feather stars would have made no impression on my mind and no notice would have been taken of it.

Remembering that the Birmingham Natural History Society had taken the young, I mentioned the fact to Major Lang, adding that I had never seen them myself. Next morning I was gratified to hear that on examining at his leisure the proceeds of the haul he had found them in quantity.

This successful result induced me to revisit the spot near the Thatcher after an interval of six years, and there, as I fully expected, *Antedon*, both adult and immature, was abundant. With this experience to guide me, I have since tried a third locality, when, though the adults were less numerous, the pedunculate young, and every stage of growth up to about an inch in diameter, appeared to me to be even more numerous than at Berry Head or the Thatcher.

In conclusion, I beg to say that it will give me pleasure to afford the fullest information in my power to any naturalist desirous of dredging in Torbay. It has often been a source of regret to me to see strangers wasting their time in dredging in spots where, as my old boatman used to say, they could not expect to meet with anything "of any consequence."

ARTHUR ROOPE HUNT

Southwood, Torquay, November 6

As the localities of *Antedon rosaceus* seem to be exciting interest, I may notice that I dredged the adult state in June, 1875, in Bressay Sound, sheltered in about 10 fathoms water, and in June, 1876, abundantly between Mount St. Edgecumbe and Duke Island, Plymouth, in about the same depth of water, in each case on a rocky bottom.

PHILIP B. MASON

Burton-on-Trent, November 8

Meteor

On November 6 I observed a large meteor of a red colour. It commenced near the zenith and took a sinuous course about west-south-west, dividing into two portions after it had travelled about 40°, one portion disappearing about 10° above the horizon nearly due west, the other taking a north-west direction, and disappearing somewhat higher; it was not very bright, but seemed to be a large one. I should like to hear if anyone else has seen it; the time was between 8 and 9 P.M.

Clithero, Lancashire

T. NOSTRO

THE MUSICAL ASSOCIATION¹

THE third annual session of this Society opened on Monday, November 6, with a paper of considerable interest from Alexander J. Ellis, Esq., F.R.S., "On the Sensitiveness of the Human Ear for Pitch and Change of Pitch of Notes in Music."

It appears from the Annual Report, just issued, that the Association numbers 170 members, and is in a sound financial position. It may therefore be considered to have passed its period of infancy, and should now be permanently reckoned among the learned confederations of the metropolis.

It is not altogether uninteresting to look back at its origin and to point out the fulfilment of the especial objects for which it was established.

The first conception appears to have emanated from Mr. William Spottiswoode, Dr. Stainer, and a few other

¹ Report and Proceedings of the Musical Association for 1874-5 and 1875-6.

gentlemen, representing about equally the scientific and artistic sides of music, who circulated a letter among their friends, and in a private meeting held at the house of the Treasurer of the Royal Society, laid the foundations of its future organisation. The original title chosen for the new society explained at more length its peculiar objects than that which it now bears; it was "Society for the Investigation and Discussion of Subjects connected with the Art and Science of Music."

The double function herein indicated has hitherto been steadily and rigorously carried out. Indeed the Council for 1876-7, numbering among its members eminent musicians such as the two professors of Oxford and Cambridge, Messrs. Hullah, Osborne, Goldschmidt, and Dr. Stainer, is supplemented on the side of Science and Literature by the familiar names of Mr. Spottiswoode, Prof. Tyndall, Dr. Pole, Mr. W. Chappell, and Mr. George Grove.

The contributions recorded in the two annual volumes of "Proceedings" are strictly in concordance with the initial programme; they cannot be better summed up than in the words of Mr. Spottiswoode's letter above-named, advocating "the formation of a society similar in the main features of its organisation to existing learned societies. Its periodical meetings might be devoted partly to the reading of papers upon the history, the principles, and the criticism of music, partly to the illustration of such papers by actual performance, and partly to the exhibition and discussion of experiments relating to theory and construction of musical instruments, or to the principles and combination of musical sounds."

In the first year Mr. Hullah, Dr. Stainer, and Mr. Sedley Taylor, spoke on musical notation and nomenclature; Mr. Bosanquet and Mr. Ellis furnished valuable illustrations of true and tempered intonation; Mr. Charles E. Stephens criticised Dr. Day's theory of harmony; Mr. Baillie Hamilton and the writer described their respective improvements in musical instruments.

During the second session there were two papers of great value, mainly historical, from Sir F. Ouseley, "On the History of Ecclesiastical Music in Western Europe;" and from Prof. W. G. Adams "On Wheatstone's Musical Inventions," two "On Notation," by Dr. Pole and Prof. Monk; two mathematical and physiological, by Lord Rayleigh, "On Our Perception of the Direction of a Source of Sound," and Mr. Lennox Browne "On the Management of the Voice;" two mechanical and instrumental, by Mr. de Pontigny, "On Kettledrums," and by the writer "On Standards of Musical Pitch;" one critical, perhaps even polemical, by the active secretary of the Association, Mr. C. K. Salaman, "On Musical Criticism."

Several of the above communications, especially Mr. Bosanquet's two exhaustive papers "On Temperament," call for full analysis; but the general status and purpose of the Association itself are so far novel as to deserve preliminary attention. Music, of all æsthetic subjects, is that which is most deeply marked by its bisection into art and science; much of the art, little of the science is ancient; for Euclid, Pythagoras, and even Galileo carry us only a short distance into the laws of harmony. But it is peculiar to music that instruments accidentally invented, slowly improved, fabricated simply for performance, and intended solely to charm the ear, have at a later period furnished the tools and apparatus of scientific analysis. The violins of Gaspar di Salo and Stradivarius, have for centuries illustrated the laws of harmonic sounds, and even as early as the time of Tartini, furnished the *Terzo Suono*, which figures so boldly in modern acoustics.

As the instruments themselves fulfil a double purpose, so are their votaries divided into two very distinct classes, those namely of artists and theorists. The essential value of Mr. Spottiswoode's proposal lay in the appreciation of this schism, and of the means towards healing it. The