

the "reaction of the animal as a whole" explains the fact.

Prof. MacBride has a photograph of an operated Ciona and a normal one side by side. What is the proportional length of the oral siphon in a "normal" Ciona, and what was that length in the operated siphon before operation and after regeneration?

J. T. CUNNINGHAM.

East London College,  
Mile End Road, London, E.,  
November 24.

#### Mrs. Hertha Ayrton.

It must be a matter of pain and surprise to many readers of NATURE that Professor Armstrong should have written such an article as that which appears on p. 800 of the issue of December 1.

I was privileged to know, with the intimacy which is only possible to a doctor, both Prof. and Mrs. Ayrton during many years. He was my patient until he died—prematurely in one sense, but in another he lived long, and accomplished more than many men who live to extreme old age. It seems almost sacrilege to speak of their married life, or of the perfect sympathy and companionship which distinguished it; it is difficult to understand how any one professing to have been their friend could suggest that they were "an ill-assorted couple."

No woman could have nursed her husband with more untiring, unselfish, and tender devotion. Of their scientific work I leave others to speak; there will surely be many who will vindicate their memory in this respect. But as an old and intimate friend I am well qualified to protest against the heartless comments upon the private life of a very noble woman of whose living presence we are so recently bereaved. The Latin races respect their dead friends with an emotion we can at least respect. The Day of the Dead, held in reverence probably surpassing anything in the Christian ritual, has scarcely passed this year, and yet Prof. Armstrong can write such an article upon his dead friends. Surely for the rest of his life he will regret not having declined that "appeal" for an obituary notice. H. H. MILLS.

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December 3.

The only comment I can possibly make on the above is, that the writer must be strangely lacking in sense of humour.

When I used to tell my friends that they were "ill-assorted," knowing this full well and knowing me, they did but smile. As did Mrs. Ayrton—when, to terminate one of our fruitless discussions on the woman as man, I sometimes said: "We will admit you are 'up to us' (apart from being yourselves), when you are regularly engaged as chefs and produce one to go down to posterity with Soyer."

May I here note the need of a correction in my article—the insertion of the accent over the first *e* in *Mélisande*? So beautiful a name should not be reft of the least shade of its charm.

HENRY E. ARMSTRONG.

#### Zoological Bibliography.

LEST it should be assumed from my friend Dr. Bather's communication to NATURE of December 1, page 794, that my letter was premature, let me state that my communication was forwarded to NATURE at the express wish of the Conference of Delegates and

with the concurrence of the various officers of the British Association, who were present at the time.

There is no misunderstanding whatever as to the wishes of the representatives of the numerous scientific societies present in regard to the size of publications, and if Dr. Bather will consult such a publication as Collins's "Authors' and Printers' Dictionary," issued by the Oxford University Press, he will find that demy-octavo is slightly less than the measurements he gives, namely,  $8\frac{3}{4} \times 5\frac{1}{2}$  in., and this is the size which that particular committee recommends to all societies publishing annual reports, etc. T. SHEPPARD.

The Municipal Museums, Hull.

#### Micelles and Colloidal Ions.

MR. W. B. HARDY in his letter to NATURE of October 13, p. 537, entitled "The Micelle—A Question of Notation," advocates the conception of the colloidal ion and postulates that the ideas of other workers coincide with his own, so that merely a question of nomenclature is involved; nevertheless, in his opinion, it is positively wrong to refer to a colloidal ion as a micelle.

It will be shown in a paper by Miss M. E. Laing which we hope to publish in an early number of the *Journal of Physical Chemistry*, that all movement in an electric field can be summed up in a single formula which applies equally to ions, diaphragms, gels, suspensions, micelles, etc., and governs the movement of any such charged constituent relative to the solvent. The experimental evidence shows that there is a gradual transition from uncharged or isoelectric colloidal particles, through those which are very slightly charged, such as the neutral micelle in soap solution or the particles in a gold sol, to those which are much more highly charged, like the ionic micelle of soaps, and then to the true ions which are fully charged.

Now comes the question of nomenclature. There is no question as to the fully charged ion where this coincides with the chemical unit. In soap solutions, however, there is a sharp distinction between the behaviour of the single crystalloidal molecules or ions and their respective aggregations, the neutral and ionic micelles, which, for example, can be held back by an ultrafilter.

It would seem as repugnant to designate an aggregate of soap ions containing substantial proportions of undissociated soap and of solvent a "colloidal ion" as it would be to call aggregates of hydrated neutral soap, which are probably the structural basis of soap jellies, "colloidal molecules," although one is as logical as the other. I have called each of these aggregates a micelle, and have described their electrical condition by adding the prefixes neutral and ionic respectively. The term micelle is customarily employed in a similar sense in contemporary French and German science. JAMES W. MCBAIN.

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University of Bristol.

#### Biography of Richard A. Proctor.

WE are at present engaged in the preparation of a "Memoir" of the late Richard A. Proctor, and to assist us in our work we should be deeply grateful for the loan of any letters which readers of NATURE may have received from him. We will carefully preserve the letters and return them as soon as possible.

S. D. PROCTOR-SMYTH.  
MARY PROCTOR.

9 Orchard Road, Altrincham, Cheshire,  
December 3.