of a great need. The need is that of a serviceable index to each or all of the completed monographs. Personally I have felt the absence of such a help most sorely in Davidson's large work on the Brachiopoda, and have wasted much time in searching for such well-known British species as *Productus Martini* or *P. productus*, *Lingula Voltzii*, and *Hemithyris angustifrons* (I mention examples from the last two days only). My colleagues say that equal difficulty is experienced with other monographs. We shall perhaps be told that indices are already published to these monographs; that may be, but they rarely contain what one wants, and some of them are not even arranged in alphabetical order. The proposal, then, is that a real index should be compiled to all the volumes as yet published by the Palæontographical Society; that it should contain every name mentioned, either in the text or in the explanation to the plates, whether synonym, variety, species, or genus; that these names should be arranged alphabetically under both generic and trivial names; that the index should be compiled by some experienced person or persons; that it should be published in octavo form, two columns to a page, certainly not in quarto form, and not on thick paper. The cost of preparing and publishing such an index might be defrayed partly by special subscription, partly by substituting it for a portion of the volume for one year. Most scientific men, including the members of the Palæontographical Society, would probably be more grateful for a good index than for another instalment of new species. By publishing this letter in your widely-read Magazine, you will perhaps elicit the views of geologists in general, and the Council of the Palæontographical Society would see what support was likely to be forthcoming.

F. A. Bather.

OBITUARY.

CAPTAIN MARSHALL HALL.

Born February 6, 1831. Died April 14, 1896.

Marshall Hall, late Captain in the Royal East Middlesex Militia, J.P. for Wilts, F.G.S., F.C.S., etc., was born in London on February 6, 1831, and died at Parkstone, Dorset, April 14, 1896.

As the only child of an eminent physician and physiologist, he was brought up in an atmosphere of science from early days, and it is to this circumstance that his *penchant* for things scientific was in a great measure due. Thus, he was at all times very handy with his microscope, which he found useful both in his chemical and mineralogical investigations. Besides an interest in science, mountaineering and yachting had strong attractions for him, and it was these three factors which largely influenced his career.

No one science could claim his exclusive allegiance; but he evinced an interest in Geology when he became a Fellow of the Geological Society in 1866, most probably at the suggestion of his

intimate friend, Morris. Shortly after taking this step a brief notice from his pen, in the GEOLOGICAL MAGAZINE, showed that he had already begun to interest himself in the glaciers of Norway, as he claimed to have made a rough survey of ice-tracts at the end of fjords where no yacht had ever been seen before.

Probably the best thing that Marshall Hall ever did for scientific investigation was by organizing the cruise of the "Norna" in 1870. It is true that on this occasion he was ably seconded by two remarkable men, Saville-Kent and Edward Fielding; to the former of whom especially the scientific credit of this most successful essay in marine zoology was due. Still, it was on the initiation, and mainly at the expense, of Marshall Hall that these results were obtained; and they are all the more striking when we remember that this expedition took place three years before the "Challenger" started on her memorable voyage.

A few years afterwards (1874) we find Marshall Hall, still full of enthusiasm, making a proposal in the GEOLOGICAL MAGAZINE for a "Swiss Geological Ramble"; and he asks the then President of the Geologists' Association (Dr. Woodward) what he would think of this extended excursion. Two years subsequently he was busily engaged, in conjunction with Sorby, Haughton, Heddle, and others, in founding the Mineralogical Society. The first contribution to the Journal of that Society (August, 1876) is a short note written by himself and Clifton Ward "Upon a portion of Basalt from the Mid-Atlantic."

From time to time he contributed short papers to the Mineralogical Society, not forgetting to suggest collaboration amongst mineralogists. As he was now for the most part resident in Switzerland, the rocks of the Val d'Anniviers and the Saasthal supplied him with a congenial theme. Here both his chemical knowledge and his climbing propensities were of use. Thus, in 1882 he narrates how he traced certain euphotides and serpentines to an *arrête*, some 10,000 feet high, descending from the Allalinhorre, and he compares the rocks thus observed *in sitû* with transported masses occurring in the neighbourhood of Veytaux and Geneva.

More recently, and since he came back to England, Marshall Hall returned with renewed ardour to an old love—the study of glaciers. His Alpine experiences helped him here. In this connection his friend and *collaborateur*, Professor Forel, writes[1] that Hall had often contributed original notes to the reports on glacial variations issued by himself. Later, in 1891, when living at Parkstone, Marshall Hall continued to follow up this subject with great eagerness, and obtained from the Alpine Club the formation of a committee charged with the care of studying the oscillations of the glaciers in different parts of the British Empire. In 1893 he contributed a short paper to the GEOLOGICAL MAGAZINE on "Glacier Observations, more especially Colonial," being the substance of two articles which had already appeared in the *Alpine Journal*. He was successful also in interesting the Colonial authorities in his scheme.

[1] "*In Memoriam*": *Alpine Journal*, August, 1896, p. 176.

Finally, in 1894, at the International Geological Congress of Zurich he initiated the formation of the "Commission Internationale des Glaciers," being himself elected representative for Great Britain and the Colonies.

A wide field had in this way been found for the exercise of his energies, and there seemed every prospect that he might continue to do much good work, when, to the great sorrow of his family and numerous friends, he was carried off, after a short illness, at the age of 65, just as his plans for the universal study of glacier action were beginning to bear fruit.

Marshall Hall is not to be estimated merely by his writings, which, like his speeches, were for the most part exceedingly brief. His strength rather lay in his faculty of bringing men together, and for this purpose his genial disposition and agreeable manners eminently qualified him. In the heyday of life he discharged these functions in a generous and hospitable spirit. Unfortunately, as time went on, his physical infirmity of deafness, in conjunction with other causes, tended to withdraw him from society at large, though never from social intercourse. To the last he struggled bravely against all these difficulties, frequently busy, but, as he says in a letter written a few months before his death, grown older and less inclined to work. "Not that I am often idle," he remarks; "things come in all of a heap, then comparative repose, then more work. There will not be much to show for *sundry years*, even if I got folks to do anything systematic. So far, the New Zealanders are my best men."

Those *sundry years* he was not destined to realize, and now that the originator is gone will the work be continued?

HENRY JAMES SLACK, F.G.S., F.R.M.S.

BORN OCTOBER 23, 1818. DIED JUNE 16, 1896.

AMONG the pioneers of science, more especially interested in the promotion of microscopical investigations in Biology, the name of Henry James Slack must be engraved upon the annals of the present century, of which his life had covered nearly 78 years.

H. J. Slack was educated at Dr. Evans' school, North End, Hampstead, and at the age of seventeen he entered a wool-broker's office in the City, in which he speedily became a partner, but he retired in 1846, finding the business uncongenial to his literary and scientific inclinations: he then devoted himself to legal and forensic studies, and was in due course "called," but although a keen debater, and intensely fond of either a scientific or political discussion, he never practised at the Bar.

Whilst residing at Ilfracombe, in 1849, he wrote several articles which appeared in the *North Devon Journal*, and in 1852 he became proprietor and editor of the *Atlas* newspaper, to which Walter Savage Landor contributed some poems on Garibaldi. He also acted as temporary editor of the *Westminster Quarterly*; and contributed numerous articles both to newspapers and other