

sheath of tissue, are in *Pronomenia* or *Peripatus* still distinct from one another, and are connected by a number of transverse bands or commissures, looking something like the rungs of a ladder.

The interesting morphological results here very briefly sketched are left quite unnoticed by Mr. Romanes, who tells his readers that "within the limits assigned" it would have been impossible for him "to do justice to the more important investigations upon these matters." We think that this was a most unfortunate decision, and it has resulted in Mr. Romanes not doing justice to himself or his subject. The reader would have found some relief from the decidedly tedious accounts which the author gives of his own researches in the thought that jelly-fishes form but a link in the great chain of the evolution of the nervous system. In the next place it is to be observed that by limiting himself to an account of his own experiments Mr. Romanes loses such support as is to be had from results bearing on, or, as in the case of some of those of Frédéricq, anticipating some of his. Lastly, where a naturalist, such as Mr. Sladen, is, as occasionally happens, mentioned as having obtained different results, it would have been well to give some reference to the observer's remarks.

Mr. Romanes's book consists very largely of a *résumé* of, or quotations from, his papers in the *Philosophical Transactions*. The place of publication of these essays relieves us from the duty of offering any criticism upon them here, and it now only remains for us to say something as to the manner of the book.

First of all, it may safely be asserted that Julius Cæsar was a greater literary artist than Mr. Romanes. There are but few pages on which "I" is not to be found, though not always, we are glad to say, so often as on p. 185, from which the following sentence is extracted:—

"As I have already said, I am not inclined to deny that there is probably some truth in the current theory of rhythm as due to ganglia; I merely wish to point out distinctly that this theory is inadequate, and that in order to cover all the facts it will require to be supplemented by the theory which I now propose."

It is to be feared that by writing both for the general reader and the working physiologist the author may find himself blamed by the one for being too technical, and by the other for being too elementary. For the one or the other he might have written an interesting or a valuable work; in aiming at doing both at once he has, it may be thought, failed to accomplish either.

PROF. ARCHER.

MR. THOMAS C. ARCHER, Director of the Edinburgh Museum of Science and Art, died suddenly at the Midland Hotel on February 19th. He was originally a clerk in the Customs at Liverpool. When that city was asked to contribute a collection of the imports into that port to the Great Exhibition of 1851, the corporation and the dock authorities selected Mr. Archer to make the collection, and to him also was committed the task of arranging and naming the specimens. This work he performed in the most satisfactory manner, and the Liverpool collection became consequently a marked example of scientific system and popular instruction.

At the close of the Great Exhibition Mr.

Archer returned to his duties, but he added to his labours the task of lecturing at the local institutions and educational establishments. He was appointed, in accordance with the charter of incorporation, a professor in the Liverpool Institution. He wrote at this time a small work on 'Economic Botany,' which was published by Lovell Reeve & Co., and which proved to be a very useful text-book for young students. During this period Dr. George Wilson, the Regius Professor of Technology in the University of Edinburgh, was extending the Industrial Museum, commenced by Prof. Jameson in 1812, which was supported by the joint action of the city and the university. This passed in 1854, by a satisfactory arrangement, to the Department of Science and Art, and a new building being determined on, a considerable extension of the original design was necessary, Dr. Wilson being named Director of the Industrial Museum of Scotland in 1855.

Prof. Archer was a few months after the death of Dr. G. Wilson appointed by the Department as Superintendent of the Technological Museum, on which office he entered on the 26th of June, 1860. He was made Director in January, 1866. Prof. Archer was elected a Fellow of the Royal Society of Edinburgh, and he contributed several papers to its *Proceedings*; amongst others we may name the following: 'On the Remarkable Occurrence of Graphite in Siberia,' read March 2nd, 1863; 'On an Undescribed Variety of Flexible Sandstone,' February 1st, 1869; 'On Two Species of Foraminifera,' and 'On some Objects from the Nicobar Islands of great Ethnological Interest,' February 6th, 1871. The extension of the museum under the direction of Prof. Archer was in many respects remarkable. He was essentially constituted a collector, and but few men possessed the power which he did of securing gifts, many of them of considerable value. The appearance of the Edinburgh Museum at the present time is a most striking memorial of the director whose services we have lost.

GEOGRAPHICAL NOTES.

THE facsimile of a map drawn by General Gordon at Khartum, on March 17th, 1874, of his route from Suakin to Berber and Khartum, just published by Mr. Stanford, must prove a welcome memorial of the gallant officer whose loss all the world deploras. The facsimile is exceedingly well done. It shows that General Gordon lost no opportunity to add to our geographical knowledge of the regions through which he travelled, although he once wrote in a pet from the Upper Nile: "I declare I do not care whether there are two lakes or a million, or whether the Nile has a source or not. I do not care whether there are blacks, or greens, or blues up there." Indeed, our maps of the region of the Upper Nile bear many traces of the work done by him, or by officers on his staff.

Mr. Stanford sends us two more war maps. Both embrace the Nile from Korti to Khartum and the region eastward to Suakin, the scale of the one being sixteen, that of the other twenty miles to the inch. Both have inset plans of Khartum and its environs, and the latter has, in addition, a map of the whole of the basin of the Nile as high up as Senaar. These maps are based upon recent publications of our Intelligence Department.

The same publisher has issued as usual his very useful map of the tramways, railways, and other alterations in London for which Bills have been deposited. He has also produced an excellent plan of the London boroughs proposed in the Redistribution of Seats Bill.

Herr Menges writes from Berbera on January 9th that Berbera is perfectly quiet, notwithstanding that its garrison merely consists of thirty policemen and there is no man-of-war in the harbour. A fight between two tribes of Somal, which took place in the town itself, had been suppressed by the energetic action of the

British agent, who heavily fined the disturbers of the public peace. Caravans were almost daily arriving from Ogaden and other inland districts. Harar is to retain a small garrison, under English officers, but its civil administration will be entrusted to the family of its former Emir. This information promises well for the success of the various expeditions now engaged in the exploration of Somal-Land.

The brothers Denhardt have determined to make Kisimayu, a small town to the south of the Jub, their base of operation for an exploration of the Galla countries extending thence to the neighbourhood of Lake Samburu.

The first number of the magazine projected by the Scottish Geographical Society is to appear to-day (February 28th). Out of a large number of applicants the committee have selected Mr. Arthur Silva White as acting secretary and editor to the Society.

Capt. Burton writes:—

"In your 'Geographical Notes' (February 14th, 1885) I read, 'No traces of recent volcanic activity were observed by them [Capt. Rogozinski and Dr. H. Zöller, while ascending the Camarones or Camarones peak], and they failed to discover the solfatara mentioned by Capt. Burton.' As regards the *solfatara*, I carefully described it in my volume (p. 206), and forwarded a canister full of the burning sand and sulphur to the Geological Museum, Jermyn Street. For the evidences of recent volcanic activity, see p. 208. On May 22nd, 1867, Mr. Frank Wilson, who is now in London, wrote to me: 'You will be interested to hear that on the 15th of May and three following nights Camarones was observed to be in eruption. A stream of lava was distinctly seen running down for a considerable distance from a point somewhat lower than the peak on the Fernando Po side. Flames issued from the same source as the lava, and appeared as if shot out horizontally, "like the flame from a blowpipe," as one of the Spanish officers described it to me.' It would seem that these last visitors belong to Gibbon's extensive family of 'blind travellers'; they certainly contrast sharply with their only too wide-awake countrymen."

SOCIETIES.

ROYAL.—Feb. 19.—The Treasurer in the chair.—The following papers were read: 'On the Structure of Hyaline Cartilage,' by Dr. G. Thin,—and 'Note on a Preliminary Comparison between the Dates of Cyclonic Storms in Great Britain and those of Magnetic Disturbances at the Kew Observatory,' by Prof. B. Stewart and Mr. W. L. Carpenter.

BRITISH ARCHAEOLOGICAL ASSOCIATION.—Feb. 18.—Mr. T. Morgan in the chair.—It was announced that the unsafe condition of the ruins of Carew Castle, noticed during the recent Congress, had been reported to the owner, Mr. E. G. Carew, of Crowcombe Court, and that works of repair had been arranged for. These will be strictly limited to the upholding of the building to prevent injury by frost or tempest, and nothing will be done to diminish the appearance of the building as a ruin.—Mr. L. Brock reported the existence of a large portion of old London wall, visible in the street of the same name at Moorgate, just to the west of Allhallows Church. It is now revealed by recent excavations for buildings, having been buried by the accumulated earth of centuries.—Prebendary Scarth exhibited a drawing of a Roman pocket sundial found at Herculaneum.—Mr. Howlett exhibited a fine lamp with Christian symbols found in the Roman catacombs.—A paper 'On the Roman Baths of Bath' was then read by the Chairman. After referring to Mr. Irvine's conjectural restoration, which appears to be well supported by more recent discoveries, he proceeded to describe in detail the whole of the building now revealed, tracing the portions uncovered from their first discovery. The size of the structure is already proved to be very great, and that it must have possessed great architectural beauty is already sufficiently proved. The cold water was brought from the well known in mediæval times as St. Winifred's, while the hot water rises on the site. Probably only about one-half of the vast building has been traced. The inscription found on a leaden plate has been the subject of various readings, but Mr. Morgan made out its import to be that Cetus Minianus, with Vilvia and a little sister, with others, took the waters, the ladies having taken four and the gentlemen five baths.—In the discussion which followed, Mr. J. W. Grover referred to Julius Solinus, who speaks of the hot springs of Britain, by which he believed those at Bath were meant.—The paper was illustrated by several