with curly, not really woolly, hair are occasionally to be seen ; but I venture to think that such occasional freaks are casual, and wholly without significance; although they were regarded as evidence of a Negroid element in the population by the late Sir George Campbell.

As, in consequence of the statements and theories of M. Quatrefages, the idea is already spreading that traces of pygmy Negrito races are to be found in these parts of India, I contem-plate on a suitable occasion, ere long, publishing some notes, made at the time, on the tribes I met with in my travels in the wild regions referred to. I shall therefore say no more at present, save that the evidence culled by M. Quatrefages out of General Dalton's lithographed groups-one of a girl with her hair cropped short, and another of two somewhat curly-headed Sonthals-in support of his theory, is not merely feeble, but is liable to mislead.

Sir Wm. Flower has referred to the use by M. Quatrefages of the term Mincopie for the Andamanese. As he points out, there is in reality no such term. How it originated, though long unknown, has been suggested by Mr. Man. Its derivation foiled even the acute research of Sir Henry Yule. Its first use was by Lieut. Colebrooke in the year 1795, but it has not been recognised in any Indian dialect, and does not seem to have ever been in use among Anglo-Indians, any more than is the name Zebu, which is used in some European languages for the humped cattle of India. Such names, and there are a few others, not being current in the country itself, have to be forgotten by those who visit India. I well remember being not understood when I used the term Zebu on my first arrival in Calcutta some thirty years ago. V. BALL.

Dublin, May 13.

## Epping Forest: an Explanation.

SOME years ago you were good enough to publish a paper of mine on the conservation of the Forest from the naturalists' point of view (vol. xxvii. p. 447). That paper was written soon after the Forest was taken over by the Corporation of London, when some unpleasant signs of artificial treat-ment had become manifest, and more especially with reference to certain railway schemes which, in the in-terest of naturalists, we of the Essex Field Club felt it our duty to oppose. It is a matter of ancient history that our opposition was successful. My object in entering the lists again to compose and the composition of the scheme for a scheme the scheme transformer and transfor is to assure your readers, as representing the scientific public, that the controversy which is now going on concerning the management of the Forest has nothing whatever to do with the agitation about the railway scheme of 1883. This statement may appear superfluous, but I am compelled to trespass upon your space because certain unscrupulous critics are in the habit of misleading the public by quoting from that paper published twelve years ago, without giving date or context, and without a single word of explanation as to its object. Moreover, the critics in question have endeavoured, by a method which in other controversial spheres would be called by a very strong name, to make it appear that some of the views put forward in 1883 are opposed to the attitude which, it is well known, I now hold in the present controversies. So far as naturalists are concerned, they may rest assured that nothing that is now being done is in the way of injury to the Forest; far from this, there are signs of marked improvement. The policy of the Conservators is to restore the Forest to a natural condition by thinning out overcrowded pollards which are now beginning to injure one another, and to kill off the varied undergrowth which is such a relief to the gloomy barrenness of an unnaturally dense growth of trees. I may point out that the overcrowding is due to two opposite causes, viz. to entire neglect in some parts, and to too much attention in others. The latter cases refer to those parts in which in past times the rights of lopping were severely exercised. Here of course, now that the Conservators have extinguished these rights, the pollards are throwing up straight and lanky branches of a most unsightly character. In those very limited parts which were not formerly pollarded, and which consist of groves of spear trees, no attempt at systematic thinning had been made before the present Conservancy, and here also there is an overcrowding necessitating woodcraft. Within the last few years all that has been done has been done with care, skill, and forethought. I rejoice to be able to bear testimony on this point, and to reassure those who may have been misled from a want of personal knowledge of the nature and history of the district, into giving credence to the intemperate correspondence in the newspapers. May 21. R. MELDOLA.

NO. 1334, VOL. 52

## PROFESSOR LOTHAR MEYER.

Gestern Abend 11 Uhr entschlief plötzlich sanft und schmerzlos im 65. Lebensjahre mein lieber Mann

## DR. LOTHAR MEYER

ord. Professor der Chemie an der Universität Tübingen.

JOHANNA MEYER geb. Volkmann mit ihren Kindern.

Tübingen, den 12. April 1895.

E were thankful his "falling on sleep" was "sudden, gentle, and without pain"; but we grieved he should have left us so soon.

Julius Lothar Meyer was born at Varel in Oldenburg, on August 19, 1830. After completing his school course in the Gymnasium, he studied in the University of Zürich from 1851 to 1853, then at Würzburg from 1853 to 1854; from Würzburg he went to Heidelberg, where he remained till the autumn of 1856, and from thence he migrated to Königsberg, where he remained until Easter 1858. Meyer's original intention was to devote himself to medicine, and he graduated as Doctor in Medicine at Würzburg on February 24, 1854. At Heidelberg he came under the influence of Bunsen, and his work became more and more chemical. At Königsberg his studies were devoted mainly to mathematical physics, under the guidance of F. Neumann. In 1858 he took the degree of Ph.D. at Breslau; and on February 21, 1859, he re-ceived leave to teach chemistry and physics. From 1859 to 1866 Meyer was in charge of the chemical laboratory of the Physiological Institute at Breslau. In 1866 he was called to the Royal Prussian *Forstakademie* at Eberswalde, where he remained until 1868, when he went to the Polytecknikum at Carlsruhe. In 1876 Prof. Fittig was called from Tübingen to the University of Strassburg, and Lothar Meyer was appointed to fill the vacancy at Tübingen.

He had nearly completed twenty years' work at Tübingen when the summons came. Cerebral apoplexy stopped his labours, on April 11 of this year; and, plötzlich, sanft, und schmerzlos, he passed.

It was while teaching chemistry and physics at Breslau that Meyer published the first edition of the work on which his reputation as a philosophical chemist chiefly rests. "Die Modernen Theorien der Chemie" appeared in 1864. A second edition was published in 1872; and since that time have appeared a third, fourth, and fifth edition. At the time of his death Meyer was engaged in the preparation of a sixth edition, which he intended to publish in three, more or less independent, parts. An English translation of the fifth edition, by Messrs. Bedson and Williams, appeared in 1888. In 1883 Profs. Meyer and Seubert recalculated the atomic weights of the elements from the original data, and laid all chemists under a debt of gratitude by publishing their results, under the title "Die Atomgewichte der Elemente aus den Originalzahlen neu berechnet.

Lothar Meyer was one of the earliest investigators of the relations between the properties and the atomic weights of the elements. In the first edition of his "Modernen Theorien" (published in 1864) he traced relations between the atomic weights and the chemical values of the elements ; and in December 1869 appeared a memoir by him entitled "Die Natur der chemischen Elemente als Funktion ihrer Atomgewichte," wherein he arranged the elements in order of atomic weights, in a single table, and indicated the periodic character of the dependence of properties on atomic weights.

The clear enunciation, and the application in detail, of the most far-reaching generalisation that has been made in chemistry since the work of Dalton, must, undoubtedly, be credited to that great chemist Mendeléeff

but, nevertheless, a perusal of the controversy between Mendeléeff and Meyer shows, I think, that Meyer arrived at the fundamental conception of the periodic law independently of Mendeléeff. Those who are interested in such controversies will find papers by Mendeléeff and Meyer in *Berichte* xiii, pp. 259, 1796, 2043 [1880].

Meyer in *Berichte* xiii. pp. 259, 1796, 2043 [1880]. In his discourse to the German Chemical Society on May 29, 1893, "Ueber den Vortrag der unorganischen Chemie nach dem natürlichen Systeme der Elemente," Meyer quotes the words which Laurent had used fifty years before concerning organic chemistry, and applies them to the teaching of inorganic chemistry at the presentime: *—que l'arbitraire y règne sans partage*. If these words can be applied to the teaching of inorganic and general chemistry to-day, how much more fully and literally were they applicable at the time when the first edition of Meyer's "Die Modernen Theorien" appeared thirty years ago! That book has probably done more than any other publication within the twenty years after 1864 to advance the study of comparative chemistry; its influence on the conception of chemistry as an accurate and orderly body of facts and principles has been very great, and has been wholly good. The labour bestowed on the preparation of the first edition of the "Modern Theories" must have been immense. The author speaks in his preface of rewriting the MS. three times. It is true that thirty years ago physical chemistry was practi-cally non-existent, that the facts of organic chemistry could be mastered and held by a man with an ordinary memory, and that one might be a chemist without first being a mathematical physicist. But it is also true that the facts of inorganic chemistry had not been coordinated by the luminous conception of the periodic law, that there was a lack of clearness in the notions of most chemists about the structure of organic compounds-for Kekulé had not yet made his famous ride on the top of the Clapham omnibus—and that the many isolated facts regarding the influence of temperature, time, and the masses of the reacting bodies, on chemical changes had not been gathered together and illuminated by the law of mass action and the conceptions arising from the appli-cations of this law. It was then that "Die Modernen Theorien" appeared; and at once a flood of light was thrown on the whole domain of chemical science. Old problems were made clear, and new problems were suggested. Chemistry entered on its modern phase.

As the study of comparative chemistry progressed —a study which was introduced by the enunciation of the periodic law—it became necessary to know with accuracy the analytical bases whereon rested the values accepted for the atomic weights of the elements. Hence Lothar Meyer was induced to devote a large amount of labour to the somewhat thankless task of recalculating these values; the result of this work, carried out with the help of his colleague Prof. Seubert, appeared in 1883. This work received additional value from the fact that it appeared almost at the same time as Clarke's "Recalculation of the Atomic Weights." Every worker in this department has the data of all previous workers brought to his hand, and presented in the most manageable form.

Besides these two treatises bearing on general chemistry, Lothar Meyer was an investigator in the sphere of experimental chemistry. He has published memoirs on subjects in almost every branch of the science; on the atomic weight of beryllium, on determinations of vapour densities, on the combustion of carbon monoxide, on the preparation of hydriodic acid, on the transpiration of gases, on various organic compounds, and on other matters.

A great chemist has passed away from us; his work remains, and that work will ever be held in remembrance.

M. M. PATTISON MUIR.

NO. 1334, VOL. 52

## NOTES.

THE Institute of France has decided to solicit subscriptio for the erection of a statue to Lavoisier at Paris. It is intende to make the appeal an international one, so that all admirers of Lavoisier may do honour to the memory of one of the creators of modern science. Subscriptions may be sent to the Treasurer of the Committee for the Lavoisier Memorial, 55 quai des Grands-Augustins, Paris.

THE centenary of the Institute of France is to be celebrated next October. The *Times* states that on the 24th of that month the foreign representatives invited to the celebration will be received, and the Minister of Education will hold a reception. On the following day M. Faure will attend a ceremony at the Sorbonne, and a banquet will be held. There will also be a dramatic entertainment and a reception at the Elysée. Chantilly, the future property of the Institute, will be visited on the 27th, by permission of the Duc d'Aumale.

LIVERPOOL, determined that the visit of the British Association in 1896 shall be a success, has taken time by the forelock. At an influential meeting held in the Town Hall last week, it was announced that an executive working committee had been appointed thoroughly representative of the inhabitants of Liverpool and the neighbonrhood. The Chairman is the Right Hon, the Lord Mayor of Liverpool, the Vice-Chairmen are Sir W. B. Forwood and Mr. E. K. Muspratt; the Hon. Treasurer, Reginald Bushell, and the Hon. Secretaries, Prof. W. A. Herdman, F.R.S., Mr. J. C. Thompson, and Mr. W. E. Willink. The meeting was very enthusiastic, and the keynote running through the various speeches was to the effect that the welcome extended to the members of the British Association should not in any direction be allowed to compare unfavourably with that at the meeting at Manchester in 1887, which in the matter of subscriptions at present holds the record. From the short statement made by the Hon. Treasurer, this hope seems likely to be realised. Without making any public appeal for funds, but simply putting the matter before a few of his more influential friends, the Hon. Treasurer was able to make the gratifying statement that no less than £1350 had been subscribed. The Committee preferred a subscription list to a guarantee fund, and in this they are no doubt well advised. A donor, however, is not entitled to any privileges as a member of the British Association, by reason of his subscription, but to every subscriber of £10 a member's ticket or two associate tickets will be given, and one associate ticket to subscribers of  $\pounds$ 5. With this early start, Liverpool ought to have no difficulty in raising the  $\pounds$ 5000 which Sir W. Forwood regards as the minimum sum required for a successful and record meeting.

THIS year's conversazione of the Society of Arts will be held in the South Kensington Museum on Wednesday evening, June 19.

DR. THORNE THORNE, C.B., F.R.S., has been appointed a member of the General Medical Council for five years, in place of Sir John Simon, resigne<sup>A</sup>

MR. GEORGE MURRAY has been appointed Keeper of Botany in the British Museum, in succession to Mr. Carruthers, who retires on superannuation.

THE death is announced of Dr. H. F. C. Cleghorn, well known for his work in connection with the organisation and development of the Forest Department of India. He was for some years president of the Royal Scottish Arboricultural Society, and examiner in forestry to the Highland Society. He also took a leading part in the founding of the forestry lectureship in the University of Edinburgh.