ur was called heavy oil of tar. This substance contains a large proportion of light products, as observed by Dr. Hofmann, and called by him "kynol" or "alumine," which possessed the property of attracting many coloring powders and coloring agents, a magnificent blue colour. An interesting fact has been discovered by Mr. James Young of Glasgow. The oil of tar was distilled at a low temperature the products were collected at a temperature from those which were produced when the oils were distilled at a high temperature. One of the most striking differencs was noted in the process of the alkali was reduced in the latter, and a valuable lubricating agent called paraffin, a solid substance, and a large quantity of carbonized hydrocarbons, were also distilled, which, being free from smell, were valuable for commercial purposes, and had received the general name of paraffin oil; or, as Dr. Lyon Playfair remarked, in his report of the Government of 1851, it was "liquid coal gas." This paraffin oil, when mixed with other oils, was not most extensively employed in the manufacture of candles of Manchester and the neighbourhood. Solid paraffin was also obtained in the distillation of paraffin, and this made it possible for the paraffin to be sold without the tar being added to it about twenty per cent. of wax. These candles were remarkable for their transparency and the purity of their flame.

LIEUEN.—Nov. 21st.—Thomas Bell, Esq., President, in the chair. William Freeman Dayll, M.D., and William Goudie, Esq., were proposed as Fellows.—Dr. Mackay, A.L.S., presented dried specimens of Buxus excavata, B. helenae usitata, and a cluster of the fruit of Solidago leachiana, from the Oxford Botanic Garden, Dublin; Mr. David Moore, A.L.S., presented specimens of the fruits of Taxus borneoensis, Taxus cuspidata, and Taxus verdunnskii, all from the Oxford Botanic Garden, Dublin; Dr. W. T. Higg, F.L.S., presented dried specimens of two remarkable shrubs, Euphorbia griffithii, and a species of Scrophularia, transmitted from Peru to a German house, as valuable pharmaceutical samples. Mr. Brough exhibited numerous specimens of leaf-beetles, prepared in such a manner by allowing portions of the leaf to remain in the original state as to present different natural objects, portraits, &c. The President announced that Vol. XXI, Pt. 3, of the Transactions of the Royal Institution was in distribution for the Fellows. The conclusion of the Transactions on the Structure of the Seed, and peculiar characters of Palminia and Sphacelaria, was read. The President then read a paper entitled "Observations on the Structure of the Seed, and peculiar Characters of Palminia and Sphacelaria." This paper details the results of the President's investigation into the structure of the seed of the Placentalia. The family is divided into three tribes. 1, the Cucurbitae, where numerous microscopic tubercles of the fruit of each cell, fixed horizontally by their bases to the persistent axis column; 2, the Cucurbitae; and 3, the Genus, having only a single seed in each cell, which is always fixed to the axis column by its terminal face. The seed of the Cucurbitae has three coverings, a testa completely investing a crustaceous testa, within which is a membranous inner integument; the testa is connected at its base by a narrow strip to the foot of the axis, from which a point a few inches from the foot extends in its vertical face, beneath the axis, to the summit of the testa, where a distinct hole is seen (the diaphragm), through which the rayed ribs of the axis are hollowing the cavity; near its summit it is a small hemispherical, shaped prominence, while its main body is solid and round, and an expansion on its aëreous white portion, which extends from the outside of the axis, to the inner surface, as a shining speck at the base. Gaertner regards the same body of this nucleus to be altitude, and the testa to be the embrasure of a large cavity, consolidated into one solid mass. (Camellias and other flowering botanists, considered the seed to be a simple tubercle, but the embryo plant to be the superior radicle, and the great body of the nucleus to be two fleshly cotyledons consolidated together, the line of the junction being indicated by a well-marked whitish axe portion of the axis, and the best evidence to show that there has been a complete misconception of this structure, and he demonstrates the fact that the axis body of the seed is considered to be the radicle, consists of two minute cotyledons, indicated by a distinct cleft which separates it; that the great body of the cotyledon is a gigantio inferior radicle, and that the axis portion is its calix, terminated at its apex by a minute pellucid, seen in the base of the cotyledon, and at the base by the shining navel, as always distinguishable. In the Tomatater the seed is always large, and encased in a scarlet fleshly axis, whose flattened margins overlap each other along the dorsal face: the testa is much thinner, with a larger ventral hilum, where the rape, indicated in its substance, is spread out into branching nerves: the nucleus is solid and homogeneous, resembling that of the Cucurbitae, only that the apical protruberance is wanting, and its base a small navel is seen. The testa of the cucumber differs in no respect from that of the Tomato: except that the axis is entire, very pulpy, and generally smooth and white. The structure of the nucleus in both tribes has been considered by botanists to consist (as in the Cucurbitae) of two distinct parts, with a very diminutive superior radicle, all encompassed in one solid body. Mr. Miers shows, on the contrary, that these presents are a monstrous inferior radicle. At first sight the cotyledons appear to be altogether wanting, but on examining attentively a minute part, produced in the bottom of the apical hilum, which under a strong lens will be found to consist of four diminutive imbricated scales, the two outer scales being the cotyl- edons—the inner ones the axis column. That such a correct view of its structure is proved by the drawings of Rechbergh and Wight, who give figures of seeds of Strophodon in state of germination, where the plumule is seen extending in a long shoot, with the cotyledons fixed in the middle minute points produced by the extension of the upper portion of the calix, while this axile cauliform process, growing at the same time as the plumule, has extended itself into a long root. These facts, in the opinion of the author, are conclusive in regard to the truth of his views, and he proceeds to state that the seminal envelops are really of the structure he describes, because Dr. Asa Gray contends that unequal (structure of the analogous to that of the Cucurbitae, that the scarlet axis is a testa always considered to be an axis, is the testa, and that the hard crustaceous coating lithio is regarded as the outer or inner integument of the seed; but Mr. Miers shows, from the observations he made in Brazil, that Dr. Gray has overlooked the existence of a third or innermost integument, the true tegumen with its apical chalaza, and also of a free rape running outside the crustaceous shell, and capable of extending the external envelop, from the base to the summit, where it passes through the diaphragm to lose itself in the chalaza of the inner integument, thus proving beyond doubt that the outer coat is crustaceous, the crustaceous shell testa, and that the inner membrane is the true tegumen. He enters into many considerations on the nature and origin of the axis, and in proof of the generally received opinion that it is of extraneous production over the original coats of the seed, the following facts are shown by Cambyses that in the seed of Cucurbitus the development of the axis sometimes takes place when the ovule is already marked by the deciduous the latter which had been considered as the former attaining its full development, arising from an extraordinary expansion of the seminal or placental portion of attachment that the axis. The author concludes that the many facts adduced in this paper tend to bring the family of the Cucurbitae into closer connexion with the Palminiae: for if we conceive the cauline axis tench which separates the cotyledons from the great body of the nucleus in Cucurbitus to be suppressed, we have the exact form of the embryo in the Cucurbitae. They tend also to bring this family closer relation with the Palminiae and the Pericarpae, and to remove them from the Tomatateres, with which they have hitherto been considered to be most intimately allied. The author stated that he was at present engaged in the investigation of the order, with the view of describing the affinities, and defining the structure and generic distribution of the family to which many of the genus have been hitherto very imperfectly understood.

ROYAL INSTITUTION.—General Meeting, Dec. 5th.—W. R. B. Grieve, Esq., Q.C., F.R.S., Vice-President, in the chair. The Earl of Rose, Benedict Lawrence Chapman, Esq., and Henry Pemberton, Esq., were elected Honorary Members of the Royal Institution. The Secretary reported that the following arrangements had been made for the Lectures in the Chemical Room in 1852—Six Lectures on 'The Chemistry of Combustion,' (adapted for a juvenile audience), by Michael Faraday, Esq., F.R.S., and Fullerian Professor of Chemistry, R.I. (commencing on Dec. 29th, 1851.) Eleven Lectures on 'Magnetism and Electricity,' by John Treadwell, Esq., Ph.D., F.R.S., Professor of Natural Philosophy in King's College (commencing in Jan. 1852.) Eleven Lectures on 'Principles of Chemistry,' by John Hall Gladstone, Ph.D., F.R.S., in January, 1852. Eleven Lectures on 'English Literature,' by W. B. Donne, Esq., commencing in Jan. 1852.

MEETINGS FOR THE ENSUING WEEK.

Monday.—Statistical, 8 p.m.—On the Statistical Position of Life Insurance in England and Wales, by Mr. Roderic Mina. Royal Academy, 8 p.m.—On the Fossil remains of Plants. Professor Hutton on Painting.

Tuesday.—Civil, 8.30 p.m.—On the Civil Nature of the Criminal Law. Professor Hall on Painting.

Wednesday.—Society of Arts, 8 p.m.—On the Character and Nature of the Bank-notes by Surface-printing from Electro-typers.

Thursday.—Royal, 8.30 p.m.—On the Recent Progress of Biology. Professor Babington on Printing.

FOREIGN CORRESPONDENCE.

In July last I left this town for Malacca, and spent more than two months there.

French have numerous popolations so varied and distinct living together as to be found in Malacca. The ubiquitous Chinese are perhaps the most numerous, keeping up their manners, customs, and language, and making a separate community of itself. They are in numbers, and their language is the Lingua franca of the place. Next come the descendants of the Portuguese—a mixed, degraded, and degenerate race, but who still keep up the use of their mother tongue, though rashly mutilated in grammar; and then there are the English rulers, and the descendants of the Dutch, who all speak English. The Portuguese spoken at Malacca is a useful philological phenomenon. The verbs have mostly lost their inflections, and one form does for all moods, tenses, numbers, and persons. En est, en va, does for everything connected with going. Adjectives are of the same form in feminine and plural terminations, so that the language is reduced to a marvellous simplicity, and with the biggest possible value to the student of languages, so easy to be mastered by one who has heard only the pure Latinian.

I can name several people as varied as in their speech. The English preserves the right sitting coat, waistcoat, and trousers, and the above for the lady of high cravat; the Portuguese patronizes a light jacket, or more frequently short jacket and trousers only; the Malays wear their national dress, and sarong, with loose drawers; while the Chinese never depart in the least from their national dress, which, indeed, it impossible to improve for a tropical climate, when as regards
comfort or appearance. The loosely hanging trowsers, and neat white half shirt-half jacket, is exactly what a dress should be in this latitude.

These houses, as Malacca does lie on the north side of the little river, and consists of narrow streets of small houses, some devoted to shops, others to the more fancifully ornamented dwellings of the Chinese and other more civilised inhabitants, embossed in groves of cocoa nut, mangosteen, durian, rambutan, jack, mango, areca-nut, and many other fruit trees, with flowers and beautiful foliage as agreeable as the fruits themselves, the merits of which I cannot but think have been too highly rated. Some small hills near the town are densely occupied in Chinese graveyards, many acres of ground being covered with large horseshoe-shaped tombs of solid masonry, generally much and fantastically adorned with painting, gilding, and carving. Fisher in the interior are extensive marshy flats cultivated as paddy fields, out of which low isolated hills rise like a reek. Further on, again, these flats contract into narrow valleys, winding about amidst low undulations. It is along the sides of these that the Malay villages are situated, only distinguishable by the thatched roofs and fringes of names in which their houses are buried. Every spot of ground which is not nor has been cultivated is covered with vines.

In Malacca, as in Singapore, the Chinese do everything. They build houses, they fetch wood and water, they cultivate vegetables, they clear the paddies by laboriously pounding in a huge mortar, the stumper of which is worked by a large dog, they work the tin mines of the interior, and the gold mines of Mount Ophir. They do everything in their language horses. A Chinese groom is an impossibility.

My first excursion was to a place called Gading, thirteen miles from the town, where I had permission to reside in the house of Mr. Britton, a planter, who is a large sugar sugar planter, and who I expected would keep it. There were no people in the tropics who cultivate the soil as these do. They do not merely plant and reap. They dig, and till, and tend, and care for the Chinese (I trust because they were Christians) who keep it. There are no pigs for the pigs are better lodged than with us, having a floor of poles with a thatch beneath, in which all the manure is collected.

I found the men very quiet and civil, doing anything I required with great willingness. Their food consisted of rice, a little fish, and a few vegetables, with weak tea and water. They, however, eat a great deal, and four times a day. The Malay, on the contrary, take only two meals.

There were several tin mines in the village near, employing many thousand Chinese. Ore is obtained from beds of a quartzose sand in the flat valley before mentioned. It exists in small black granules, which are separated by washing. This is done generally by discarding the cup in large wooden basins, or sometimes by a stream of water in a large wooden trough. The smelting is done in Eastern clay furance, bound together with poles and ratten: the clay being poured into a hole at the bottom, and is boiled into a mould, forming an ingot of about 50lbs. weight, and very hard.

After a fortnight’s residence one of my Portuguese servants was seized with fever, and I was obliged to return with him to Malacca, where the other was seized with a violent fever, and the fever, and a liberal use of quinine, and went to another locality among the Malays, about whom, and of my visit to Mount Ophir, I will write more in the course of the winter.

VARIETIES.

The "Vestiges of Creation."—"Mr. Page presents his respectful compliments to the Editor of the "Dublin Letter," and is pleased to forward his latest publication, relative to the authorship of the "Vestiges of Creation," from the "Dublin Advertiser."

"The following note, kindly made by Mr. Page, at the close of his lecture on Wednesday evening, should, we think, set for ever at rest all rumours and reports respecting the authorship of the "Vestiges."

"In returning the thanks of the meeting to Mr. Page for his lectures, Mr. P. Anderson, the chairman, made allusion to the rumour, very widely circulated, that the lecturer was, in some way or other, connected with the authorship of the "Vestiges of Creation," remarking that those who had had the pleasure of listening to Mr. Page's interesting and instructive descriptions, must at once perceive that there was nothing in them at all favouring the views taken by the author of the "Vestiges.""

Mr. Anderson, at the contrary, that the conclusions arrived at by the lecturer, from considerations of great interest and importance, must all have felt, a much more philosophical and satisfactory tendency.

"In noticing the decision of the chairman, Mr. Page begged to state most emphatically, and without a shadow of reservation, that he was not at all, in any way, responsible for the facts or opinions of the "Vestiges."" The "Vestiges" was published, he engaged as one of the literary and scientific collaborators of the Messrs. Chambers; and it so happened that it was in circulation for some months before he saw or read a line of it. The first time he saw it was in the hands of Mr. William Chambers, who came into his room, and showed the "Vestiges" with the remark, "Here is a curious work making the rounds of society," and requested him (Mr. Page) to write a notice of it for the "Journal" ("Chambers' Edinburgh Journal."

For this he was paid an additional sum of money, and he had not read twenty pages of it when he felt convinced that it was the production of Mr. Robert Chambers, and that an additional line he read only tended to establish that conviction. Some days after, when asked for the review, he stated he could not prepare one for two reasons,—1st, that he did not think the work suited for notice in the "Edinburgh Journal." and 2nd, because he believed it to be the production of Mr. Robert Chambers.

Mr. William Chambers received this announcement in his usual kind and courteous manner, but denied all knowledge of the matter, and here the subject dropped. Some time after, however, and when the work was being severely handled by the reviewers, Mr. Robert Chambers wrote to the author, and in an affectionate letter, explaining the circumstances of the authorship, upon which Mr. Page remarked that all he could say was, that had he seen the sheets before going to press, he perhaps could have prevented some of the blunders on which the reviewers were found so much of their opposition and argument. The consequence of this remark, apparently was, that some time after Mr. Robert Chambers sent him the proof-sheets of the second or third edition of the "Vestiges," with the request that he would enter on the margins any corrections or suggestions that occurred. This he did: and since then he had not seen or read a word of the many editions through which the work has passed, unless the preference of the "Vestiges" to the "Dunster's Letter," and similar insertions, in which he would not venture to characterise as he felt they ought to be characterised and condemned. In reading the proof-sheets alluded to, he (Mr. Page) had done the same as was in the habit of doing for others, and what he had himself more recently done for Dr. Anderson's "Course of Creation," a work avowedly written to counteract the erroneous and objectionable tendency of the "Vestiges." Such was the statement he had to make; and he had only further to remark, that he had not the least idea the authorship of the work was equal to his ability, or equal to the assiduity with which he had endeavoured to promote his doctrines, he (Mr. Page) would have been spared this somewhat painful and unpleasent explanation. He, himself, had never written a line which he thought shame to avoid, or entertained a suspicion which he was afraid to utter; and it would have been more merciful grace and annoyance to others had the author of the "Vestiges" proceeded upon the same maxim.

He now, so far as he was aware, made a clean breast of it; and if merit was attributable to the work, the author would reap his high reward of demerit, the blame would, at least, fall on the right shoulders."—"Gilmore-place, Edinburgh, 28th Nov., 1854."

Initial Honours.—"People have a sort of natural proneness to imitate Dr. Pangloss, and, like him, to exceeding tepidly and respectably for those who have acquired such distinctions by merit, or even by purchase merely, to wear them in any way they think proper. I would, however, recall your attention to the fact (which I have occasion, by a correspondent a few weeks ago) that numerous persons who have no title whatever to chim fellowships of learned and scientific societies, are nevertheless daily in the habit of advertising their names in various ways, either with the initials F.S.A. appended thereto, or other alphabetical commendations. This evil resulting from this state of things has just been exemplified to me in a practical manner, that I venture to revive the subject with your permission in your columns, hoping that some course may suggest itself whereby societies prejudiced by such proceedings may be enabled to 'put down all further occurrences.' A prospectus has been placed before me by a friend, with the inquiry whether a person whose name appears therein, with the initials of the Society of Antiquaries strikingly annexed, was a Fellow or associate of some body. The inquiry and doubt at the subject were very much, for the name was that of an individual whom we both knew to be of 'inferiority honest, and who would be a very desirable Fellow of any society. Ex suo disce amicum seemed to suggest itself to my friend's mind, and for the time I felt him to have so perceptible an associate, and resolved to attempt a submission to my friends of the title to the use of the collegiate initials F.S.A. It was, however, a relief to my mind when one received back a letter expressing the certainty that the individual in question is not a Fellow of the Society.

I could multiply instances to show the indirect effect reflected on our system of national education; or that it is inadequate to the increasing necessities of their national population; but when we look into it, we find that she has educational resources to an extent which she has never had fell credit for, and that there are public provisions for still greater educational efforts, to a degree and of a variety of which a stranger has little conception. Properly speaking, it is not the universities of England; but yet her schools of all kinds are almost as numerous, and many of them quite as efficient, as though there were; and the public money is almost as efficiently supplied for this important purpose in all its ramifications."—Norton's Literary Gazette.

TO CORRESPONDENTS.

F. S. A. has been received. R. D. in our last.