that mollities ossium depends on the power which the arteries possess of secreting ossific matter from the red particles of blood, which the teeth do not carry, and therefore they cannot be affected in a similar manner.

2nd. The experiment by Mr. Hunter, of tinging the teeth with madder, is far from conclusive; since, if bones that have been tinged lose their colour slowly, it would require an almost unlimited time for the same change to take place where the circulation is so low that the red particles are rarely admitted.

A late writer in your Journal says—“If the teeth were vascular bodies, it must necessarily follow that whenever a tooth is once affected by ulceration or gangrene, extraction is the only remedy.” Again, “were the teeth vascular bodies, and decay the result of ulceration, the operations of filling and stopping would be impossible, for who has ever heard, says Mr. Samuel Cooper, of filling or stopping an ulcer with metal, as it is practised on the teeth?”

An irritable ulcer? All this is easily explicable, in my humble opinion, upon the simple fact, that the teeth do not admit the red particles of blood, and from the foregoing sentence I dissent *in toto*. I deny, first, the justice of the position, that “if the teeth were vascular and became ulcerated, extraction would be the only remedy.” It is true that if they be vascular, as that vascularity forms a part of the general circulation, the tooth must be subject to changes going on in or through the circulation. And such, in fact, is the case. Toothach and caries, or gangrene, are very much under the influence of constitutional treatment, caries being no more necessary to toothach than toothach is to caries. Secondly, I dissent from the position, that “were the teeth vascular, and decay the result of ulceration, the operation of filling and stopping would be impossible.” Certainly not. It is the non-admission of the red particles of blood, and the consequent low vitality of the teeth, of which we avail ourselves in stopping the cavity with metal. Where, then, is the similarity between ulcers which carry red blood, and the teeth which do not? Where is the analogy between a part which can be repaired and a part which cannot?

To recapitulate; I ground my belief in the vascularity of the teeth—1st. On the fact of their death, if they be cut off from the general circulation. 2nd. On the fact of their being powerfully influenced by diseases of other parts of the body, phthisis, jaundice, &c., and by medicines taken into the system, such as mercury.

3rd. On the circumstance of the pain which frequently accompanies caries, that pain also being frequently relieved by local applications, when the caries does not extend to the pulp. 4th. On the fact that a great portion of the tooth may be removed by caries, before any external opening exists in it. How the two latter effects are produced, except by absorption, and how that absorption takes place without the agency of vessels, I leave to my opponents to explain. 5th. On their chemical composition. 6th. On their extreme sensibility under disease.

SKETCHES OF THE MEDICAL PROFESSION IN IRELAND.

DR. LITTON,

Professor of Botany to the Royal Society of Dublin.

THE GLASNEVIN BOTANIC GARDEN.

UNTIL a recent period botany was scarcely considered one of the sciences in Ireland, and the low state into which its cultivation had fallen, might have well justified the estimate formed of its rank. Except by a few individuals whose natural energies of mind freed them from the bondage of vulgar prejudice, it was either neglected altogether, or pursued with views but little more elevated than those of the Rhizotomists or herb-gatherers of Athens. A revolution, as rapid as it is general, has however taken place in the public mind on this subject; and it may now be said to be the most popular, as it was once the most despised of sciences in the Irish capital. Like the aloe, whose bloom is prized in proportion to the slowness of its advent, it has at length burst its plural envelopes, and captivated society by displaying its beauty and its utility. Not only are its claims to attention beginning to be recognised by that profession which so long treated it as an alien or an outcast of their *curriculum*; but by every department of the community aspiring to the possession of refined and useful information. We have now many young ladies amongst us who are better acquainted with its principles and application, than some of our remaining professors of *materia medica*,* while the crowded audiences

* We allude more particularly to the first attempt of the kind made in Ireland by Miss B...y to compile an Irish Flora—a small unpretending work which we may, without a compromise between truth

in the Glasnevin Garden, amounting often to three and four hundred persons, demonstrate the favour in which the science is at present held.

The slow progress which the science has made in Ireland, admits of an easy solution; and may be instructively cited as one of the mischievous errors committed by the directors of medical education. The College of Surgeons, at the time of its establishment, and for many years subsequently, succeeded, by a laudable attention to a single branch of knowledge, in obtaining the almost exclusive management of education in the country, and in giving tone to the public mind on that subject. The University, owing to the perverse construction of its statutes, had neither pupils nor influence to advance the study of the science, though possessed of a professor and a garden for that purpose. The Corporation of Apothecaries, which might be expected, from the immediate connexion of the objects of its institution with this science, to take an active interest in its cultivation, did not until very lately even appoint a professor for its tuition, and is still without a perch of ground to grow specimens for its pupils' instruction, notwithstanding the increasing prosperity of that body. The trading revenues of this establishment, which must be considerable, instead of originating a "Chelsea" and a "Miller" on the banks of the Liffey, were directed, to the last farthing, into the channels of private embezzlement. By that department, therefore, of the profession which alone by its influence could have promoted the diffusion of the science, it was not only neglected, but even publicly ridiculed. So far from being required as an essential in the education of the licentiates and members of the College of Surgeons, they were taught to look on its study as so much useless labour; and its practical application as an employment fitting only for old women. The incomparable ingenuity of the system and nomenclature of Linnæus, and the profound and beautiful philosophy of the method and writings of Jussieu, were looked upon as the dreams of idle speculatists, unprofitable as the pursuits of the alchemists in search of the "phi-

losopher's stone." Concentrating their views on the anatomy and diseases of a single being—on one small item in the catalogue of vitality, these empirics, who mistook a shambles for a scientific association, forgot that even this limited object could not be attained without a referential examination of the other departments of animated nature. The evil of this course did not terminate in the injury which it inflicted on the science of botany alone; it fatally extended to the other sciences, and even to the moral character of the profession itself, which was thus taught to resolve all knowledge into what were called "facts" by this empirical sect; and all those ennobling associations arising out of the proper study of science, into a code of money-making, and humbugging the public about pretended cures. Even at this hour, this body, which presumptuously arrogates the right of dictating the course of study to be pursued by the medical students of Ireland, neither has appointed a professor of botany,* nor requires the slightest information on botanical subjects from those whom they pretend to educate.

The proscription of the science by a profession with which, unfortunately, it was always identified, spread its baneful influence over the public mind, and confirmed its indifference, by example, for botanical pursuits. The obvious but erroneous conclusion that "a pursuit despised and rejected by persons with whose education it was connected, was not worth the trouble of learning," became the easy and universal response to every private and public attempt to promote the cultivation of the science. Nothing, indeed, can better illustrate the apathy which every where prevailed on this subject, than the results of, and the circumstances attending, the exertions of the Royal Dublin Society to awaken the national mind to a sense of the importance of the science. While we concede to the Society the full merit of the best intentions, we must observe that the means which they adopted of carrying their design into effect, fell far short of the difficulties which they had to surmount; and that to the original error of a bad selection of agents for the accom-

and gallantry, recommend as an useful companion to the botanical student in his excursions through that country. As an illustration of our text, we may further remark that the professor of materia medica in one of those institutions which Dr. Graves would seek to dignify with the slaving epithet of "scientific," would not be able to distinguish a branch of *pinus sylvestris* from a peacock's feather!

* There is, we believe, *one* in a state of incubation in Park-street, who, when sufficiently fledged for flight, and the botanical "aeric" in the College is prepared for his reception, will probably wing his way to that elevated station, unless, indeed, the "concours" should in the interim start up and bar his ascent. We beg not to be misunderstood—we mean a *system*, not a *person*, of whom we know nothing.

plishment of their undertaking, they committed the less excusable fault of witnessing and tolerating the incompetency of those agents for years after it had been proved in the most satisfactory manner. It is true they had a refractory soil to operate on; a soil too in which the seeds of positive hostility to the science were extensively sown and fatally prolific. Yet a man enjoying the liberal advantages of the society's patronage, alive to the important trust reposed in him, and armed with a fearless conviction of the utility of his mission, might still have achieved much in the regeneration of the public taste, if he could not entirely succeed in establishing the empire of the science on the wide basis of popular favour. Truth and science might in this, as in many other instances, have proved themselves more infectious and diffusible than error, and showed that they only required to be well planted to ensure their propagation. Unfortunately the choice of the society at that important crisis fell on a man who did not possess a single attribute to qualify him for the restoration of public taste from its vitiated to a healthy condition; and still more culpable and unaccountable was his retention in office after failing in the task they had assigned him. The old-fashioned *prig* whom they appointed Professor of Botany, and continued in that office until death removed him out of the wrong position in which he had been placed, imagined that the wearing of a sky-blue vest, and the counting the pistils and stamens of some showy flowers in the theatre of the Society, constituted the whole duties of a professor of botany. The burlesque of the science which this old coxcomb annually enacted, must be fresh in the recollection of many of our readers. Tricked out in apparel as tawdry as the pie-bald vestiture of the high priest of Flora herself, and thoroughly imbued with that dancing-master style of manner with which Chesterfield and the last century might have been enraptured, Dr. Wade always commenced his didactic duties by a preliminary eulogium on the Society. Of this truly *Hibernian* specimen of *Oriental* exaggeration it would be impossible to give an adequate description. The Society was duly put forward as the centre of national civilization; the paragon of all learned associations; the sun which blessed the most distant districts of the island with the humanizing influence of science and literature! The waters of the bog of Allan oozed away, in obedience to the improving mandate of the Society, into perfect dryness; the "purple-blossomed heaths" of the mountains of Cunnemara disappeared in the prospect of the

more profitable products of cultivation: *omnis feret omnia tellus*, scarcely described the metamorphose in store for Ireland under the ameliorating auspices of his patrons. Dryden in the palmiest days of patronage and dedication, when the refuse flowers of Parnassus were twined at fixed prices into wreaths of immortality for the great, was cold, artful, and penurious of his praise, when compared with the glowing, undisguised, and exuberant flattery of this most grateful and generous of all literary and scientific pensioners. During this stage, however, of the doctor's annual *apotheosis* of the institution in Kildare-street, the incense of panegyric was still endurable, because it was general; the members and professors present on these occasions might appropriate just as much of the floating fumes as suited their taste or their vanity; but as the Doctor proceeded to individualize the performance—to apportion his respective quota of the panegyric to each of the Society's professors,—it was certainly amusing to see them one by one withdrawing out of the theatre, amidst the laughter of the audience, in anticipated apprehension of the unmerciful brush of this old dauber! One more duty was yet to be fulfilled by the "little, round, fat, oily man of God," who certainly had "a roguish twinkle in his eye," with many other characteristics of an occupant of the "Castle of Indolence,"—a hint or address to his "fair countrywomen" on their peculiar fitness for botanical pursuits, which he usually concluded by drawing their attention to some "fair inmate" of the garden, and the gallant intimation, to one of the servants, of "*Pulcherrimæ detur!*" The prize was accordingly disposed of as the rustic taste of some "Hodge" of the garden dictated, the decision producing a commotion among the spectators of both sexes which was scarcely exceeded by that of the "judgment of Paris" himself, and more befitting the celebration of the prurient rites of the *floralia* in ancient Rome than a place devoted to the objects of science and instruction.

Such were the notions which this man entertained of the means to be employed in overcoming the difficulties of his undertaking,—such his idea of popularizing a science which has all the prejudices of the learned, and all the apathy of society in general, arrayed against it. We have dwelt with perhaps seeming prolixity and unnecessary severity on the errors committed by this individual and his too indulgent patrons; but when we reflect on the splendid opportunities abused by both these parties, and contrast the melancholy consequences of their conduct with the results of the exertions of other teachers

and other learned societies in neighbouring countries, we stand acquitted in our own judgment of having overcharged the wretched picture which we have drawn of the former condition of botany in Ireland.

Yet the evil did not rest here; the decay of the garden at Glasnevin rivalled the buffoonery in the theatre of Kildare-street. Vast numbers of plants, procured with difficulty and at much expense, disappeared from the beds and stoves, through the perverse neglect of the curator who brought up the rear of ruin headed by Dr. Wade. In our walks to the garden at this era of barbarism, we not unfrequently saw the thistle flourishing in indigenous luxuriance above the wasted remains of some costly exotic of the green-house; and the label of perhaps one the umbelliferæ, outraging the labours and nomenclature of Linnæus, standing perhaps before one of the komnuculaceæ.

Fortunately for the fate of botany in Ireland, and the improvement of the Glasnevin Garden, Dr. Wade was "gathered to his fathers," and some time after his coadjutor in mischief was dismissed. The choice of the Society now fell on a professor who has proved himself equal to the important office which he holds, his success as a popular lecturer being perhaps unrivalled in Dublin. Though it would appear that Dr. Litton did not devote more of his attention to botanical pursuits in early life than to the other branches of medical science, he possessed other qualifications in an eminent degree to compensate for this defect. A preliminary education, which may be said to have been truly learned, succeeded by a long and serious application to science and literature in the most extensive acceptance of those terms, prepared him to prosecute with effect the study of his adopted science. To him the sources of knowledge were familiar; the paths to the fountain had been often and observantly trod; and the heights of science, which mutually look into and connect each other's domains, were frequently and successfully scaled. Unlike the Cyclops of a deficient education, who, though possessed of sufficient intellectual power, knows not which way to turn in the darkness of his ignorance when stimulated by choice or necessity to studious exertion, he saw the course distinctly which he ought to pursue, and had only the delightful task of collecting and arranging those materials of instruction with which previous excursions into the fields of literature and science had made him acquainted. His lectures in the theatre of the Society, preparatory to the practical course delivered by him in the garden,

present master-pieces of popular composition on the study and advantages of botany, and demonstrate how much can be accomplished by a man of correct taste and general acquirements, when his energies and resources are concentrated on any given subject. In these admirable discourses, the selection of illustration is as judicious and copious as the warmest enthusiast in the cause of the science could desire, and as convincing of the just importance attached to it as would be required by the most sceptical or practical audience.

One of the leading features in these lectures,—a feature in them which is highly creditable to the judgment of Dr. Litton, is the attempt to awaken in his fellow-citizens a sense of the utility of the science, and to remove, by a correct and philosophic exposition of its objects, and the proper manner of studying it, those vulgar prejudices which existed in the public mind against its cultivation. This design is still further followed up and more fully developed in the course of lectures delivered in the Society's garden, which lectures usually embrace a demonstration of some of the more remarkable natural families of the vegetable kingdom. For proving to a mixed assembly, such as Dr. Litton has to address, the advantages which they unconsciously derive from botanical science, and exhibiting to them in the most attractive form the beauty of its philosophy, no better course could be adopted. By examining even but a few of the links in the vast and interesting chain of vegetable existence, the spectator is at once surprised and gratified by the successional evolution of new species, genera, tribes, and families, all differing from and yet connected with each other by shades of habit and structure so subtle and yet so distinct, that he knows not which to admire most, the superabundance and perfection of design displayed in the formation of these objects, the wonderful ingenuity of man in the discovery of their organization, connexion, and properties, or the important ends accomplished even by the humblest of them in the grand laboratory of nature. In each of these families he is sure to meet with some individual, the peculiarity of whose qualities, appearance, or structure, will fix his attention on its less remarkable relatives, and induce him to enter on their investigation. He is thus gradually led on to observe the order, harmony, and similitude, which pervade the whole system of the vegetable kingdom, from the humblest moss to the monarch oak, and to arrive at length at the only conclusion for which its study indeed would be worthy

of man's attention—the ennobling and instructive conviction of the wisdom, benevolence, and consistency, displayed in its production.

The method of viewing and studying the vegetable kingdom, to which we have alluded, has been prudently made the basis of Dr. Litton's lectures; and in carrying his conception into execution he is equally felicitous. Whatever assistance for the illustration of this design can be derived from, or whatever interest can be conferred on, the subject by an extensive acquaintance with the various branches of natural history and general literature, is seized upon and happily applied to the attainment of this object. The general stock of human learning is thus made tributary to the ornament and elucidation of his theme; but with a degree of taste and judgment which shows that he has not ransacked libraries for the purpose of ostentatious extraction, but that his communion with those sources of knowledge has elevated his own ideas and observations to a level with those from whom he borrows. His discourses consequently possess all the freshness and integrity of original composition, carrying the audience along with them without those narratorial interruptions of undisguised plagiarism which so eminently distinguish the clumsy compilations of some of his contemporaries. From the remarks which we have made (and which we could wish were more worthy of the subject), in order to point out the correctness of Dr. Litton's views of the nature of his duties and his ample capabilities for their performance, it may be inferred that in the minor details of character he is equally distinguished. In his language and delivery there is indeed a delightful absence of all that charlatanism and mannerism which would of late appear to have found their way from the green-room, not only into the theatres of science, but into every department of social life in the Irish metropolis. His respect for himself and the pursuit which he follows; his convictions of its dignity and importance, unalloyed by that blighting scepticism of selfishness and ignorance which may be seen every day in our philosophic institutions, sacrificing the true interests of science by a personal prostitution of manner, to gratify, for private objects, the vicious taste of the polite rabble, have refined his deportment into a dignified simplicity. The objects of instruction are never for a moment merged in obtrusions of vanity, or degraded in clap-traps for vulgar applause. He is wisely content to leave to science, which he so purely and faithfully serves, the never-neglected duty of securing to

her votaries that portion of admiration and esteem which they respectively deserve. In this he is right; for though such reputation is not easily earned, it is the only kind which wears well. Having secured this prize by honourable and meritorious means, we have only to express a sincere wish that he may long continue to enjoy it.

The Society were not less fortunate in the appointment of a curator. Mr. Nevin has more than realized the expectations of the society and the public, by his great exertions in the improvement of the garden. The walks, beds, ponds, and stoves, have all undergone the process of repair and alteration; and in little more than twelve months the place presents a degree of order and of elegance almost incredible to those who had witnessed its previous state of ruin. Numerous and valuable additions have been made to the contents of the green-houses, by donations, and by purchases made by Mr. Nevin in the English gardens during the last summer. The Society appear to be laudably anxious to afford every facility in their power to the botanical visitors of the garden; and from the success of the exertions which have been hitherto made, a still greater impulse to the cultivation of botany in Ireland may be anticipated.

Our space scarcely justifies an allusion to the localities of this garden, of which it might be expected we should give some account. We should, however, decline the task on other grounds. A botanic garden cannot be *safely* described, being a sort of Calypso's Isle, in which the Circean cup of natural enchantment might over-excite even the apathetic, and betray the most prudent into rhetorical excesses of description. A corner of earth, in which figures and flowers more beautiful and abundant than ever sprang from Parnassus' sides, or drew vitality from Castalia's dews, present themselves in endless profusion, is surely a dangerous theme in the month of May. We must, therefore, be held excused for not attempting to "paint the lily,"—to give body and form to a scene in which the operations of the matchless pencil of nature must be seen in order to be sufficiently prized and understood. This much however we may venture to aver for the information of those who have not visited the garden, that if all the delightful objects of foreign production which now crowd its space were removed to their native *habitats*, the grounds of Glasnevin would still be a place of which much might be said in their favour. There is wood, water, extent and variety of surface and of soil—not a paltry patch of ground, such as is usually devoted

to these purposes, but a demesne of upwards of forty acres? To this garden we may further observe there is admission two days in the week without expense; that it lies within less than half an hour's walk of the north side of the city; and that the lectures usually commence there in the month of June, and are delivered at eight o'clock in the morning by Dr. LITTON. The citizens of Dublin, and studious strangers in that city, are thus supplied with one of the best sources of amusement and instruction; and the vast number of visitors during the delivery of the lectures, show that this great advantage has at length been duly appreciated. Many observations on the further improvement of the establishment suggest themselves to our mind; but in the present disposition of the society to promote by all means in their power the true interests of the science, and of the Society's agents to forward their views in diffusing a knowledge of this useful and delightful branch of knowledge, we deem it unnecessary to disturb the general approbation of these efforts, by the publication of suggestions which we have no doubt will be realized in the course of time.

ERINENSIS.

Dublin, May 1835.

FRENCH JOURNALS.

We find in the *Journal des Connaissances Médico-Chirurgicales*, published for May, articles under the following heads:—

1. New method of treating ozena and chronic coryza. By A. TROUSSEAU.
2. Researches on several points of ophthalmology. By Professor VELPEAU. Not yet completed.
3. Theoretical and practical considerations on catarrh in general. By M. GERARDIN; and 4, an article on the marsh fevers of Bougie (Africa), and on the use of sulphate of quinine, in high doses, for their cure. By M. MARTINET.

1. NEW METHOD OF TREATING OZENA AND CHRONIC CORYZA.—There are few diseases of a simple kind which are more rebellious than ozena, when once fully established. The numerous methods proposed for its cure, and the numerous cases which we daily see resisting all the means employed to combat this unpleasant malady, sufficiently prove the truth of our assertion. Ulceration of the pituitary membrane has generally been considered

as the most prevalent cause of ozena; however, in many other cases, there is evidently no ulceration or breach of surface of any kind; here chronic inflammation has been supposed to exist by many practitioners; but this opinion is opposed by a great many facts, and we are compelled to admit that although chronic irritation may develop ozena, it is not the efficient cause of the disease. M. Trousseau adopts an hypothesis which is sufficiently ingenious, and in accordance with several physiological facts. Many parts of the body, the feet, axillæ, &c., naturally exhale an odour *sui generis*, and in some individuals a very fetid smell. Whenever the parts above-mentioned become irritated or inflamed, this odour becomes still more strong, the irritation exaggerating the natural fetidity to a high degree. The same observation is applicable to the mucous membrane of the nares: in many individuals the odour of the mucus secreted in the nares is naturally strong: whenever they catch cold in the head (as it is said), this odour increases, and reaches its maximum whenever any cause, such as ulceration, caries, &c., keeps up a permanent fluxion of the nasal mucous membrane. According to this idea ozena may be defined, a peculiar odour of the nasal mucus, which is in general occasioned by a chronic fluxion of the olfactory mucous tissue.

The tenacity of inflammations which attack the mucous membrane of the nasal fossæ has been remarked by all physicians, though nothing is more easy than to combat them by topical means when they affect only the entrance of the nares: hence the obvious conclusion that the difficulty of the cure depends upon the difficulty of carrying our remedial means immediately to the seat of the disease.

The inspiration of medicated vapours presents the most complete means of applying a substance to the whole surface of the nasal fossæ, but is accompanied with the great inconvenience of acting in the lungs at the same time; hence we are compelled to have recourse to insufflation or injection; and of all remedies, experience shows the mercurial preparations to be the most efficacious. We may employ the protochlorure or the deutochlorure of mercury, indifferently, after the following formulæ:

R. *Protochlorure of Mercury* 24 gr.;
Red Oxide of Mercury, 12 gr.; *Sugar-candy powdered*, $\frac{3}{4}$.

R. *Deutochlorure of Mercury* 32; dissolve in sufficient alcohol, and add distilled water $\frac{3}{4}$ 12. The patient must inspire strongly a pinch of the powder, and repeat it five or six times a day, or mix one or