

PREFACE.

THE intention of the present Work is to give a concise account of the actual state of our knowledge of drugs in general, using that term in its most extensive signification, as including, not only those natural substances and compounds which are employed by physicians or private practitioners in the practice of medicine, but those other substances and compounds which, from their analogy to these, are usually sold by the same retailers as sell medicines for the purpose of being used as dyes, paints, perfumes, cosmetics, liqueurs, &c.; and upon this account the work appears under the title of a Supplement to the Pharmacopœia, as that book contains only the medicines which are at present most generally used by the physicians of London and its environs.

Still, however, the medicines form the greater bulk of the work, from the vast variety of them that are employed in different places, and these are properly divisible into three classes:

1. Euporista, or easily procurable medicines, comprehending those which are collected in the neighbouring fields and gardens by the herbalists, or procured from the shops not peculiarly appropriated to the selling of medicines, as those of the druggists, drysalters, oilmen, perfumers, grocers, ironmongers, grinders, and stationers.

2. Officiala, comprehending those which are collected and prepared for use in the shops that are expressly kept for the sale of medicines, and of which the preparation is generally known.

3. Nostrums, or patent medicines, in Latin *Chemica*, comprehending those, the preparation of which is not generally known, and which are made only by particular persons, who keep their preparation a secret, or at least deny that it is known: as most of these are largely advertised, and their virtues vaunted in posting-bills, a connexion is hence formed

between the preparers and the printers of their advertisements, so that in many places the printers and stationers are the usual venders of this class of medicines. This is the original signification of the term chemical, as applied to medicine, the old chemists, like the modern apothecaries, supplying their patients with secret remedies, instead of openly prescribing those kept by the old apothecaries, now called chemists and druggists, a singular counterchange of names having, from circumstances arising out of the powers delegated to the College of Physicians, taken place. The declamations of the old physicians against the employment of chemical medicines must be principally understood to apply to these nostrums, whose composition being unknown to any but the preparer, and spurious imitations of many of them obtruded into the shops, renders them peculiarly unsafe, especially as they are now mostly used by the sick persons themselves, without any accurate discrimination of the disease, or of its actual state. This term chemical is also applied to those preparations which require a peculiar apparatus, and operose processes, and which are therefore prepared by manufacturers who supply the shops with them. These officinals were the nostrums of the middle ages, and are still distinguished from the old officinals, called Galenical, mostly discovered in times before human records, and which have descended to us from the ancient Greeks, or, more correctly speaking, from the four Egyptian schools of Heliopolis, Thebes, Memphis, and Sais. The composition of these Galenicals was ordered in the pharmacopœias in ordinary words, and they are, generally speaking, mere mixtures of the parts of organised natural bodies or their juices, and milder in their action than the chemical medicines introduced by the Arabians in consequence of their study of chemistry, and their endeavours to separate the active parts of remedies from the inactive, and to discover highly powerful medical agents. These latter were usually ordered in the pharmacopœias, and even in extemporaneous prescriptions, in the characters that had been used by the Christian Greeks, and the vessels containing them were marked with the same kind of characters. These two classes differ indeed so considerably, that until late years they were seldom both used by the same practitioner, and the Apothecaries' Society of London still continue to divide their trade, not into a retail and wholesale department, as is done in the large concerns

of private traders, but into the Galenical and Chemical, and have separate stocks and shops for each.

The substances treated of in this work comprehend all those of the first and second class, and some of the third or patent medicines, which being in great request, the wholesale druggists are in the habit of supplying their customers with imitations of them, respecting which the author has procured the receipts of many of the most respectable houses in London; and from the agreement between these receipts in essential articles, it may be presumed that they are as accurate copies of the originals as the secrecy in which the latter are enveloped will allow.

In mentioning the uses of the first class, which principally consists of plants and a few animal substances, it must be kept in mind that the author considers himself merely as an historian, and does not vouch for the reality of the virtues ascribed to them, and even in some places has affixed a note of admiration to mark his incredulity; yet at the same time it is probable that these plants would not have enjoyed the reputation they possess, if they had not been found useful; and the neglect into which they have fallen in England, is partly to be ascribed to their not being exhibited in sufficient doses, and in some degree to the credit given by the venders of foreign drugs, and their activity in promoting the sale of them, but still more to the prevalence of apothecary practice, for, as the apothecary evades the privileges of the College of Physicians, by pretending only to sell medicines to his patients, it is his interest to make as small a stock as possible serve his purpose.

As to the officinal preparations, all those kept in the shops of druggists in town or country, whether for the supply of apothecaries, ferriers, or private practitioners, are inserted; the alterations which have been made in the last century in the Pharmacopœias of the Metropolitan College, with the variations of the two provincial Pharmacopœias, are succinctly shown. It may seem to some that this was an unnecessary task, but it must be considered, that although pure apothecaries, or young beginners fresh from the schools of London, Edinburgh, or Dublin, may pay implicit obedience to the last edition of these works, yet the older practitioners, and the youth trained under them, naturally prefer the preparations to which they have been accustomed; and as those practitioners, who have not been bred in the London

Hospitals, prefer the study of the old authors, who have enjoyed the praises of centuries, and in which the plants, &c. are designated by their real names, in preference to the modern authors, who have not yet passed through the ordeal of public opinion, and who, in their fondness for novelty, necessitate their readers to learn an everchanging language, and a constantly vanishing theory; so the druggists, who profess to keep whatever articles are in request, are obliged to retain in their shops the drugs and compositions which, although they are rejected by the colleges, still enjoy their ancient reputation; and retail customers, who have been accustomed to the taste of any popular medicine, will prefer the shop where they can procure the article with its old flavour, of which an instance occurs in paregoric elixir, in which the college has discarded the oil of anise-seed, which the retailer must either put in, or see many of his customers carry their money to some other shop, where they pay less obedience to the mandates of the college. The author would also have willingly given all the compositions that have ever been inserted in the Pharmacopœia, although not used at present, for the sake of those who read the old authors, as the Pharmacopœias themselves are difficult to be procured; but this would of necessity have added to the extent of the work, which has exceeded the limit that was set to it.

There is now first published, under most of the officinals, the method which the wholesale druggists of London actually use in making them. In giving these receipts the author has quoted the original weights, &c. as this affords a hint as to the quantity which is consumed.

Another class of receipts which has never yet been published so distinctly as in the present work, is the substitution of cheaper drugs for dearer ones, or the reduction in price of sundry articles: this by many is styled adulteration, and all the topics of vituperative rhetoric are lavished upon the practice, and very justly, when the substitutes or reduced articles are sold at the same price as those which the druggists technically distinguish by the appellation *verum*: this, however, is a practice, of which no house of respectability would be guilty. These substitutes and reduced articles are manufactured for two descriptions of customers; first, for those very clever persons in their own conceit, who are fond of haggling, and insist on buying better bargains than

other people, shutting their eyes to the defects of an article, so that they can enjoy the delight of getting it cheap; and, secondly, for those persons, who being but bad paymasters, yet, as the druggist for his own credit cannot charge more than the usual price of the article, he must therefore deteriorate it in value to make up for the risk he runs, and the long credit he must give.

Having thus explained what may be found in this work, it remains to say a few words upon some circumstances connected with the general nature of it.

A frequent source of error arises from the weights with which the apothecaries ought to compound their medicines being different from that by which they buy and sell, so that they should have both piles, whereas, the gold and silver smiths, who also use the Troy, not only compound, but also buy and sell by it, and therefore require only that pile. Some schemers have proposed to remedy this by introducing a new pile decimally divided, but this would only increase the confusion, unless we could suppose, that a legislative act, like the waving of a magician's wand, or the stroke of a harlequin's sword, could change all the old authors to the new standard: and both the ponderal scales would be very awkward to reduce to the decimal standard, which has the inconvenience of having only two divisors without remainders, viz. 2 and 5; as well the avoirdupois, which seems to have been formed by the common traders, from the continual bisection of a horse-load, taking a new integer whenever the fractional expression became inconvenient; as the Troy, which seems to be a scientific weight, invented in the hierarchal colleges of Iran or Egypt, by the multiplication of the weight of some standard seed little liable to variation, by twelve, its multiples or aliquot parts, those numbers being chosen, that the integers thence arising might admit of as many divisors as possible without remainders being left. If it were thought absolutely necessary to have the ponderal and arithmetical scales the same, it would be far easier to introduce a duodenary and even a hexadenary scale of notation, which would improve arithmetic, and merely oblige persons of education to learn a couple of new multiplication tables, than to alter the weight to which the common people have been accustomed. It is, however, only when the common pound of sixteen ounces is inadvertently taken for the Troy pound of twelve ounces that the error in respect to the

composition of medicines is of any great consequence; upon this account it were to be wished that the college in their future editions would avoid that source of error, by directing ounces only, without any mention of pounds by weight; for, in using the common ounces, with the drachms, scruples, and grains of the Troy, or with the liquid measures, the ratio of error is only as 101 to 111, which is very trifling; and if those that use the common weights were to add an ounce overweight to every ten, whenever the smaller weights, or liquid measures, are used in the same composition, the error would be rendered very inconsiderable, because 11 oz. avoirdupois differ only by gr. xijss from 5x Troy.

As physicians do not themselves prepare the medicines they exhibit to their patients, it is very convenient for them to intimate to the neighbouring retailers whom the sick employ for this purpose, the medicines they are likely to order, and the mode in which they wish certain compounds, which require time for their preparation, should be kept ready in the shops: this, and this alone, is the true office of a Pharmacopœia.

Before the publication of local Pharmacopœias, the apothecaries kept in their shops the six following books: Avicenna on Simples: Serapion on the same subject; Simon Januensis De Synonymis, and his Quid pro quo; the Liber Servitoris of Bulchasim Ben Aberazerin, treating of the preparation of minerals, plants, and animals, the type of the chemical part of the modern pharmacopœias; the Antidotarium of Johannes Damascenus or Mesue, arranged in classes like the Galenical part of our present Pharmacopœias; and the Antidotarium of Nicolaus de Salerno, containing these Galenical compounds, arranged alphabetically, of which there were two editions in use: in the common edition, or Nicolaus parvus, as it was called, several of the compositions of the Nicolaus magnus were omitted, and those that were retained were directed to be made upon a smaller scale than in the other.

The London College of Physicians first published, or rather distributed amongst the apothecaries, a Pharmacopœia of their own in May 1618, selected from the two latter of these works, with a few additions from the modern authors then in repute; but this work was found so full of errors, that it was obliged to be called in immediately, the whole impression cancelled, and a new edition published in

December following. This Pharmacopœia was published, like all the succeeding ones, in Latin, being intended, in the language of the preface, for the filii Apollinis only. Indeed the college appear to have been very angry with Culpeper for translating it and the works of the principal authors on medicine into the vulgar tongue, refusing him, as it should seem, although educated at Cambridge, a license to practise, and thus converting him into a bitter enemy. Unfortunately, the great popularity of his writings, still considered as classical amongst the common people, gave a currency to his opinions, and exposed the college to much obloquy; while the difficulties originally placed upon an admission into the college, with a view to confine the members to a small number, like the contemporaneous monopoly of the proctors of the civil and canon law, naturally led those who found themselves excluded to endeavour to evade its powers, at first by merely advising their patients to buy some medicine which "had been prescribed by a member of the college for a similar complaint:" a practice which some physicians, as Daffy, Goddard, &c. in Charles the Second's reign endeavoured to counteract, by ordering a nostrum, which could only be had at their own house, or that of a confidential agent, in most of their prescriptions, communicating, however, the preparation to their fellow-members of the college under the seal of secrecy; while others, as Merrett, furnished their patients with the necessary medicines, without any other charge than their usual fee. Afterwards the unlicensed practitioners or apothecaries did not think it necessary to confine themselves to recommending the prescriptions of physicians, but acted upon their own judgments, especially when the House of Lords decided the case of the College v. Rose, for selling medicines not ordered by a physician to a patient, in their favour; so that the desirable object of the college forming a society which should include all medical practitioners, with the exception of those of bad moral character, failed, by their confining the admission almost exclusively to those adorned with human learning, since this is certainly not essential to success in practice; and requiring in all cases, instead of an annual subscription with the option of compounding for it, a fine for a license, which excluded the poorer practitioners however skilful; not considering how much better it were to have had poor physicians for their brethren than to convert rich apothecaries

into rivals. It seems as if the college were afterwards sensible of their error by their publishing a statute, inviting unlearned practitioners to come in, and be examined in the vulgar tongue, in any part of physic they might choose, and offering to license them for that department if found qualified. At present their terms of entrance, although the highest in rank of the three medical corporations, are the most liberal, requiring only two years' residence in the university, either British or foreign, where they graduate, and even this is now and then dispensed with in favour of persons of known ability, instead of the five years' apprenticeship, followed by six or twelve months' subsequent hospital study within the British isles, required by the others. Whether this state of medical practice is of advantage to the public may be doubted, as, from the mode adopted to evade the laws respecting it, by charging only for the medicines sent in, patients are frequently obliged to swallow more medicines than are necessary, that the apothecary, or dispensing practitioner, may be compensated for his attendance. Those medicines must, in most cases, be made unpalatable, lest the patient should conceive himself to be furnished with mere slops for the sake of a charge being made; and as the medicines are prepared by the practitioner himself, a patient standing in some peculiar circumstances may be poisoned without much danger of detection. It is but a few years since a respectable practitioner, in the west of England, was tried for this crime, to which he was supposed to be impelled by the desire of hastening the receipt of the patient's property. Against all these disadvantages the public have only the convenience of having medical attendance and medicines upon credit. It is passing strange that the House of Lords, as a member of the same legislature which endeavours to secure the goodness of our leathern manufactures, by strictly forbidding the union of a butcher, tanner, and currier, in the same person, that they may serve as checks upon one another, did not, in their decision upon Rose's case, perceive the still greater danger that arose from allowing the compatibility of medical practice with the dispensing of medicines, which has long been forbidden in some of the best regulated continental states. This danger has been greatly increased of late by the almost universal junction of midwifery with apothecary practice, since midwifery accustoms the general practitioner to consider the

saving or destruction of a human life as a mere matter of calculation; as also by the recent extension of our knowledge respecting vegetable poisons, and by the great attention which is now called to the subject by the study of medical jurisprudence, there being reason to apprehend, from the imitative habits of mankind, that reading detailed accounts of crimes rouses in some cases the latent sparks of vice, and serves to perfect badly inclined persons in devising the securest modes of effecting their purpose. And this union of midwifery with apothecary practice does not, from the bills of mortality, appear to be attended with those advantages to the female sex, and their relatives, that might reasonably be expected from the union of modern physiological and pathological theory with practice since, although it appears, from Dr. Heberden's observations, that the after-treatment of the poor in lying-in hospitals has been very much improved, and the great mortality that formerly occurred in them, probably from puerperal fever, reduced, and brought down to be fully as low as in private practice, or even lower, yet in the thirty years from 1728 to 1758, both inclusive, during which women were almost exclusively employed, out of 759,122 deaths, 6481 took place in child-bed, or rather more than eight in every thousand; while in the eight years from 1807 to 1814 inclusive, when the apothecary-menmidwives were as exclusively employed, out of 147,304 deaths, 1404 were in child-bed, or little less than ten in each thousand deaths, which, when extended to the whole mortality of the kingdom, is an annual increase of upwards of 250 deaths in child-bed. Now this increase in mortality can scarcely be attributed to any other cause, but either the apothecary, who unites midwifery with medical practice, through his anxiety to attend his medical patients, is unconsciously led to unduly hasten the delivery, or that he serves as a means of communication of febrile contagion while the female is in a state peculiarly liable to receive its influence. The separation, therefore, of the two practices seems imperiously called for; and as, at present, the majority of apothecaries are disgusted at midwifery, and practise it only out of necessity, this would not be attended with any detriment, since, if rendered incompatible, what one practitioner lost by giving up his midwifery, would be made up in the increase of his medical practice through that rejected by him who made

choice of midwifery: and as operative midwifery is evidently a branch of surgery, the practice of it would enable the pure surgeons to live out of large cities, and thus extend the benefit of their help beyond its present limits.

The design of a Pharmacopœia, peculiar to London and its environs, seems to have arisen from Sir Theodore Mayerne, the then President of the College, who being also founder of the Distillers' Company, procured, in 1639, the publication of a similar work, *The London Distiller*, for that business, written indeed in the vulgar tongue, but still more carefully guarded from the profane eyes of the uninitiated, as not only the more common materials, and the quantities, were expressed by characters usually employed in other significations, but the very compositions themselves were merely numbered, to which a secret reference was made by characters from an alphabetical index; the key to all these characters being only given upon a loose paper to the freemen: but as these loose papers have been pasted into the books, and the books sold by the representatives of deceased members, the secrets have thus been revealed.

To this original Pharmacopœia some additions were made in 1627 and 1635, and in 1650 an improved edition came forth, to which further additions were made in 1677. No alterations of much consequence, however, were made until 1720, when a new edition was published under the auspices of Sir Hans Sloane: he being a botanist, the botanical names of the plants were added to the officinal names, which was a great improvement, but in some measure counterbalanced by the roots, woods, barks, gums, rosins, and other parts or products of plants being huddled together under the general title of vegetables, with only a note in the margin of the parts or products in use. In the older editions, *fructus cardam. minoris*, and *semina card. min.* were enumerated separately among the drugs, and the latter ordered in the compositions; but in this and the succeeding editions, *semina* only are reckoned among the drugs, and *semina decorticata* ordered in the compositions, a mode of expression which is evidently erroneous. The simple distilled waters were now first directed of an uniform strength, viz. 8℔ of green herb to the gallon: the sweetened spirits, or cordials and ratafias, were omitted; brandy ordered where proof spirit would now be used; and several syrups, ointments, plaisters, and similar compositions which had gone out of

use among the profession in London, were omitted, although it is probable that many practitioners still employed them, as we know that some are even now retained by private practitioners; yet it is evident that the object of the college in all these Pharmacopœias, was not to direct the practice of the kingdom, but simply to inform the retailers what compositions they would do well to keep ready in their shops.

In a new edition, published in 1745, the system of curtailment, begun by the Edinburgh College in 1738, was pursued to a considerable extent, no compound being admitted but what had a majority of voices in favour of its insertion; it was also at first proposed to omit the drugs entirely, then to give only a list of those used in making up the compounds in the work; and at last a list was made out of those which the majority of the committee supposed to be the most efficacious, and the botanical names were omitted. It is from this period that we may date the decline of pharmacological knowledge among the profession. A great fear of poisons seems to have been predominant in the minds of the compilers; among other instances, the black-cherry water, one of the few distilled waters that have any marked action, and usually made 12℔ of the fruit with the stones to the gallon, was discarded, because when made with 7℔ of stones only to the pint it was poisonous. Great pains were bestowed in restoring the compositions of the ancients to their original names and composition, and in throwing out the superfluous ingredients which a succession of ages had introduced into the shop medicines, so that it may be truly said, that in regard to the syrups, oils, ointments, pills, electaries, and other formulæ of what is called Galenical pharmacy, this edition is still the best hitherto published. In the department usually called the chemical, it was less happy: the most remarkable feature is the changes of name now for the first time introduced: the consequence of this arrangement cannot but be called unhappy, for before this time there existed an intercommunion between the several European nations that used the Latin language, by which the pharmacy of one nation was in some degree common to all; but this communication now began to be interrupted by local dialects being introduced. Respecting the curtailments that were thus made in this edition, it may be observed, that the object of a pharmacopœia being to fix the composition of whatever medicines a physician might be

likely to order, it is evident that the very contrary course to that pursued by the committee ought to have been adopted, and that instead of quoting those drugs, and ordering those compositions only which received the approbation of the majority of the committee, they ought rather to have retained every drug and composition which was not unanimously rejected by the whole college, since the medicines which might be ordered by the minority of the committee, or the other members, might, if their practice were extensive, be as frequently required as any of those that were retained, so that the real duty of these committees seems to be confined to correcting any defects in the standing medicines of the shops, to the rejection of those entirely obsolete, and the addition of whatever new compositions may be proposed by any of the members, after the best general mode of preparing them has been discussed: nor does it seem necessary to wait for a new edition for the regulation of these additions, which, when very active, as Prussic acid, vinum colchici, and the like, require an uniformity of preparation to be speedily instituted, as an official communication might be made to the society of apothecaries, the different medical journals, and the teachers of materia medica, for the information of the profession.

As the edition of 1745 excelled in Galenic pharmacy, the next, of 1788, may be regarded as the best compendium of chemical pharmacy the college has produced: although some new names were introduced, they were formed by Bergmann on the true Latin modulé, and such as the improved state of that science called for: hence they were immediately adopted without a murmur by the druggists, and still preferred by them. In the Galenical compositions simplicity was pursued to the utmost, and probably to an injurious extent, since it is well known that a mixture of drugs will frequently have more effect than the same quantity of either of them separately, and a mixture of spices is more agreeable than any of them alone. The very compound medicines which had formed the principal instruments of physicians for 2000 years, and some probably twice that period, were discarded; on the other hand, a few powerful drugs, which the college in 1745 had considered as poisons, were restored to the materia medica. Two secretly amended impressions of this edition were afterwards put forth, a circumstance that was productive of error.

The edition of 1809 is chiefly remarkable for the entire adoption of the French chemical nomenclature, in which it must be allowed that the college has avoided the solecism of their Scotch and Irish brethren, by giving the new words the gender they would have had, had they been Latin words, or could be legitimately formed by analogical derivation. It does not appear that any necessity existed for this condescension, since, although our experimental chemists had adopted this innovation, as being more conversant with the French authors, than with the 1788 edition of the Pharmacopœia, in which a regular nomenclature of salts had been reduced to actual use, yet the Germans, who, both by prescriptive right, and real merit, were entitled to take the lead in chemistry, did then, and do still, refuse to debase their own language, or their Latin works, with such limping barbarisms as sulphas, tartras, &c.; and even the French school of mineralogy, little as that nation is inclined to adopt foreign usages, follow the nomenclature of Bergmann: nor is this the only change of names introduced in this edition; many others occur, even in the drugs; as *resina abietis*, which had in the old editions and in foreign authors been used for Strasburgh turpentine, was made to signify frankincense; so *pix arida*, which was constantly used for common black pitch, was applied to white or Burgundy pitch, except that in the *unguentum picis aridæ* it must be taken in its old sense, as otherwise the compound would not answer to its English name of black basilicon. It is also evident, that in the directions for *tinctura rhæi*, the quantities of water and spirit of wine were counterchanged; and in copying those for *oxydum antimonii*, from the Dublin Pharmacopœia, an ounce of nitric acid was directed instead of a drachm, by which the process was rendered uncertain, if not impracticable, and a most violent emetic sometimes produced, sometimes a mild diaphoretic. A preference was evidently given, in ordering the chemical preparations, to the moist way, with the idea of enabling the apothecaries to prepare this class of medicines themselves; but in fact the college might more properly have put the whole of them into the drugs, merely noticing the strength of some of them, as they have done with oil of vitriol and spirit of wine; and following the old models of Mesue and Nicolaus, confined their directions to the Galenic department, since the chemicals are usually prepared in the country, where house-room,

labour, and fuel are cheap, by manufacturers, who totally disregard the directions of the college, and then exchanged with the London druggists for foreign articles. It is moreover well known, that few apothecaries prepare even the tinctures and plaisters themselves, those of large practice not having time, and those who have time to spare not consuming a sufficient quantity to make it worth their while, especially as the waste increases in proportion as the quantity prepared at once is less: this, then, being the case, the chemicals are still less likely ever to be prepared by the apothecaries themselves, especially as these, like the plaisters, require a certain facility of manipulation, the *manus oculata* of Becher, which can only be acquired by continual practice: besides, much of the merit of chemical processes depends upon their concatenation with others carried on in the same laboratory, to make the waste of one process serve as the ingredients for another, a circumstance that cannot be considered by the college, as depending upon an infinite variety of circumstances, but which has a most material influence upon the price at which the articles can be brought into the market: and it may be added, that the chemicals are always identical, or nearly so, in whatever manner they are prepared.

The *Pharmacopœia* printed in 1815 is only a corrected impression of the edition of 1809; the publicity given to the emendation is highly commendable. In this *pix arida* is still used for Burgundy pitch, and the black basilicon ordered, by the new name of *unguentum resinæ nigrae*, to be made with *resina nigra*; whether this is meant to signify black pitch as formerly directed, and still used by the druggists in making that ointment, or common brown rosin, hitherto denoted by *resina nigra*, but which will not communicate much colour, is not explained.

As to the provincial *Pharmacopœias*, the older editions of the Edinburgh were scarcely known in England until the one published in 1738; and to that college properly belongs the demerit of curtailing the medical stores of nature, in which they were so unfortunately followed by the London college, in their edition of 1745. The Edinburgh, published 1805, was the first to adopt the French chemical nomenclature, and followed even the idiom of that language in making the names in *as* masculine. This edition is also remarkable for its sesquipedalian names, and affords a strik-

ing example of the fondness of the Scotch authors for the pedantry of technical language. In an emendated edition published in 1817, these names are slightly shortened. The Dublin of 1807 is in general a copy of the London edition of 1788; but in the chemical part, the French nomenclature was adopted, the names in *as* being used, according to the English idiom, in the neuter gender. An attempt was made in this Pharmacopœia to furnish the experimenter with pure chemical agents, as well as the physician with chemical medicines.

To enforce the performance of the directions of the Pharmacopœia, the censors of the college, the wardens of the apothecaries, and those of the grocers, were empowered to search the shops of apothecaries in and about London, to destroy all they found unfaithfully prepared, and even fine the parties. While the apothecaries were only dispensers, this regulation could be strictly enforced, but when they changed into dispensing practitioners, and chemists and druggists opened shops under the sanction of the physicians, to supply the place of the old apothecaries for dispensing, and also sold perfumery, dye stuffs, paints, &c. this power of examination, when not employed as a means of vexation, as in James Goodwin's case, dwindled of necessity into a mere recommendation to use better articles; as the retailer can assert that his customers require the deterioration of the article, being unwilling to give more than a certain price, a plea which is much facilitated by the changes in the names of the compositions, so that the articles asked for by retail customers can seldom be legally considered as those now prescribed by the college; or that in practising medicine he conceives the alteration to be of advantage to his own patients; or that they are not designed for medical use, but for some other purpose: hence the present mode of examination is of necessity confined to asking for the articles used by him in dispensing prescriptions, and this admits of an easy evasion, by keeping a small stock of choice articles. This power of examining drugs, &c. being lodged in the Society of Apothecaries, has excited much ill-will, since they have subscribed a stock to supply the public with drugs and compounds; and it has been suggested, that it is contrary to the general principles of British legislation, that a corporation trading themselves on a common joint stock in any articles should be constituted examiners of them when kept for

sale by others, especially as an opinion has become current among the druggists, that there is an intention to oblige all the licensed apothecaries to purchase their medicines at the Society's hall, as in some continental states; but this is certainly a mere surmise, the offspring of the opposition with which the late Apothecaries Act has been received.

This Act, repealing the power of the Society of Apothecaries of examining medicines in shops, houses, cellars, &c. in and about London, substitutes for it the power of examining the medicines in the "shop or shops" of apothecaries through England or Wales, with power of fining the party if the medicines are not found good, the first time 5*l.* the second 10*l.* and every succeeding offence 20*l.* It is expressly declared § 5, to be "the duty of every person using or exercising the art and mystery of an apothecary, to prepare with exactness, and to dispense such medicines as may be directed for the sick by any physician lawfully licensed to practise physic;" and it directs apothecaries refusing to compound, or unfaithfully compounding such medicines, to be fined upon the complaint of a physician, the first time 5*l.* the second 10*l.* and the third to be rendered incapable of practising "as an apothecary," unless he promises, and gives sufficient security, not to offend in future. Persons not already in practice on Aug. 1, 1815, to be examined by twelve persons, appointed by the Society of Apothecaries "to ascertain the skill and abilities of such person or persons in the science and practice of medicine, and his or their fitness and qualification to practise as an apothecary:" who are "empowered either to reject such person, or to grant a certificate of his qualification." None to be allowed but those who are twenty-one years old, who have served an apprenticeship of not less than five years to an apothecary, and who shall produce testimonials of a sufficient medical education and of good moral conduct. Assistants who have not served a five years apprenticeship to be examined either by the society, or by apothecaries to be appointed in each county for that purpose. Each apothecary to pay 10*l.* 10*s.* for a license for London and ten miles round, or 6*l.* 6*s.* for a country license, and 4*l.* 4*s.* in addition if he removes to London, and each assistant 2*l.* 2*s.* Apothecaries acting without license, to forfeit 20*l.* for each offence, and assistants 5*l.* and not to recover charges in any court of law, unless it is first proved on the trial that he is duly licensed, or was in

practice before Aug. 1, 1815. If the examiners refuse a license to a person, he may apply again in not less than six months for an apothecary's license, or three months for an assistant's, and "if on such re-examination he" appears "to be properly qualified," the examiners to grant a license. (No mention is made of rejection on this re-examination, nor of any other than this second application.) A list to be published annually of those licensed in that preceding year, with their respective residences. The money for licenses to belong to the Society of Apothecaries, but the penalties for offences to be given, half to the informers and half to the society. Penalties above 5*l.* recoverable by action, in the name of the master, &c. of the society, in any court of record, and under 5*l.* by distress, by warrant from any justice of the peace, and if not sufficient distress, the person to be imprisoned without bail for a time not exceeding a calendar month; (how a penalty of exactly 5*l.* is to be recovered does not appear on the Act.) "Not to prejudice or in any way affect the trade or business of a chemist and druggist in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale and retail; but all persons using and exercising the same trade or business, shall and may use, exercise, and carry on the same trade and business in such manner as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act." The rights and privileges of the Universities, and the Colleges of Physicians and of Surgeons, and the Society of Apothecaries, are fully reserved, and all actions limited to six months next after the fact committed, or the ceasing thereof if there was a continuation.

This Act has had the singular fortune of being violently opposed, as insufficient, by those who were its original promoters, of being esteemed as a burden by many of those whom it was meant to benefit, and of being looked upon with indifference by those against whom it was intended to act. The original idea of the Act arose from the ancient and interminable dispute respecting the comparative merit of a public or private education, or as applied to medicine, between the methodics, who acquire their knowledge by attending the public schools of medicine, and practise upon the general principles there promulgated, and the empirics, who acquire

skill by the practical instruction of a private master, or by solitary study, practising at first gratuitously, and afterwards when their character is established, turning their knowledge to account; and was in fact an attempt principally on the part of some country apothecaries, to end the dispute by crushing the latter with the strong arm of power. The more liberal ideas of the London apothecaries, accustomed to the rivalry of the physicians, surgeons, and chemists and druggists, saw immediately that the original draft would never pass through the Legislature, being, in fact, no other than the very modest proposal that saving the rights of the physicians and surgeons as to practice in and about London, but cancelling those of the universities, the present dispensing practitioners and their future apprentices should have the sole right of giving any medical advice to a sick or hurt person, or of compounding or even selling any thing to be used as a medicine, or of practising midwifery, and thus to establish a complete monopoly of medicine, surgery, and midwifery, each in his own neighbourhood, while the poorer classes who could not afford to pay as liberally as their superiors, were to be neglected, or, what is nearly equivalent when in a state of sickness, being deprived of the advice and assistance of those in whom they place confidence, might conceive themselves to be neglected; while in those thinly peopled districts which did not yield sufficient employment to support a practitioner who could afford the expense of an hospital education in London, and that of a license, were either to be left without assistance, or if any person not of their fraternity dared to apply his skill to that effect, he was to lie at the tender mercies of a common informer, subject to the very high penalties that still remain in terrorem in the Act, far exceeding those for practising physic in London without a license.

The Act, therefore, was obliged to be altered, and restricted to those who "practise as apothecaries," with an express declaration that it did not extend to the chemists and druggists, whose shops are in general confounded with those of the apothecaries, and whose business differs no otherwise than that with the modern apothecary, medical practice is the principal object, retail and dispensing the secondary; while with the chemist and druggist, or old apothecary, retail and dispensing are the principal, and medical practice, mostly confined to the counter or to a few personal ac-

quaintance, the secondary ; à fortiori, the midwives, herbalists, cuppers, barbers, electricians, galvanisers, dentists, ferriers, veterinary surgeons, village wisemen, cow-leeches, and the rest of the second and third cousins to the direct descendants of Apollo and Æsculapius, are left in full possession of their ancient practice, and may be employed by those who place confidence in them, as they cannot be confounded with apothecaries, though the chemist and druggist may.

The originators of the Bill are displeased with the supposed ambiguity of the words, "to practise as an apothecary." It is true that it took 150 years of litigation, to determine the meaning of the phrase "to practise physic," as used in the statute of 15 Henry VIII. whether it prevented a seller of medicines from calling upon the sick to know what medicines he thought proper for their case, sending these in, again calling to inspect their action, and thus repeating his visits and sales: which the Court of King's Bench determined in the affirmative, but when carried into the House of Lords they decided it in the negative. Whether "to practise as an apothecary" will take as long to determine must be left to time: in the only prosecution hitherto brought into court, the meaning of the phrase was not a subject of dispute, although it should seem a far better plea than the one adopted by the defendant might have been founded upon it, he being evidently a cow-leech, and therefore, unless he had assumed to himself in some public manner the title of an apothecary, not within the Act.

As the examinations and license of the College of Physicians are to assure the public that if a patient should send for a licentiate, who is not known to him or his friends, there is a moral probability that this physician will be found deserving of their confidence, so the object of this Act is certainly to give the public a similar assurance, that a person who exercises the medical profession under the title of an apothecary, has gone through a certain routine of education and examinations, and may therefore be reasonably judged capable of performing what is required from him in that profession; whereas, in committing themselves to the care of others, patients do it at their own peril, and are guarded only by the general responsibility of all practitioners to the common law of the land, which gives damages to those injured through their gross neglect; but as the privileges of the college do not hinder apothecaries, according to the above decision of the

House of Lords, from practising in a different manner, in order that the public may not mistake the proper rank of the practitioner, so it seems probable, especially since the repeated rejection of the Surgeons' Bill, that the Legislature neither does nor will become a party to establish a medical monopoly throughout the country, but intends to leave the practice of medicine and surgery open to free and honourable competition, only preventing persons from practising under the cover of a title by which they are liable to be confounded with others who have gone through a certain regular initiation. The history of medicine, like that of other arts, exhibits instances of persons, as Sydenham, Boerhaave, and others, who were originally bred in other professions, and some, as Thomas Willis, and Verheyen, in the most humble, who yet have proved the ornaments of the medical faculty, and gradually attained its highest honours.

The definite meaning of the phrase "practising the art of surgery," or "as a surgeon," probably tended to these rejections of the College of Surgeons' Bills, as it manifestly included all who treated the sick and hurt by manual operations, and had no saving clause in favour of the descendants of the ancient chirurgical practitioners, who still survive under various names and designations; had this clause been inserted, and the college been content with the prohibition of any person publicly assuming to himself the title of a surgeon without its certificate, under a heavy penalty, no objection could have been made.

Many apothecaries themselves are averse to the provisions of this Act, considering some of them as hardships, and are moreover apprehensive that, as the establishment of the College of Physicians has eventually and gradually thrown the principal part of medical practice into the hands of the apothecaries, there is danger lest the operation of the burdens imposed by this Act should in like manner deprive the apothecaries of their present business, and throw it into other channels, as the cuppers, who already begin to increase in number, or the chemists and druggists: but this change, if ever it takes place, will of course be so gradual, that the existing members will not at any time be sensible of the injury, as the physicians did not feel any personal inconvenience from the other change.

The first hardship complained of is that which obliges all country apothecaries, after their apprenticeship is expired,

to go up to London, and in general to stop there for six months and upwards, which is a heavy expense, totally out of the power of many, and in some cases attended with the hazard of another practitioner settling during their absence in the place: hence these must of necessity either run the hazard of an information against them, or evade the Act by setting up as surgeons or chemists and druggists, trusting to the confidence their friends and acquaintance may repose in them, and thus, as their apprentices cannot in either case be received as apothecaries, the number of the profession is gradually lessened, and that of its rivals increased. There is, however, no other hardship in this, but what attends all other professions and trades, in all which it frequently happens that a youth who entered them full of confidence, finds all his hopes blasted by the chilling hand of poverty: and although this expense attending a license seems to bear so much heavier upon country apothecaries than those of London, yet, on the other hand, they have the almost certain prospect of success in future, being free from the competition of a multitude of others, and the expense of a few months' residence in London is nothing to the years a town apothecary, without introduction or purchase, may spend before he gets into equal practice with them on their first outset.

The second hardship relates to the stress that is laid in the examination upon the knowledge of the Latin language, although it be only so far as to understand the Pharmacopœia and physician's prescriptions. No excuse is admitted in this respect, although the far greater majority of the persons examined are country apothecaries, who seldom have to dispense a prescription: but it is to be considered that this is the proper business of the apothecary, and that his medical practice is only an adventitious addition. It is also considered hard by all, that a person, after serving a regular apprenticeship of five or even eight years, should be prevented from reaping the reward of his servitude by setting up in business, on account of his ignorance of what his master covenanted to teach him, but did not perform, and this without some recompence. It is true that similar examinations take place in other countries, but they are generally in favour of the apprentice. If he be not found competent, the master is fined so much as the wardens of the trade think it reasonable he should give to another

master to be fully instructed. It may perhaps admit of some doubt whether the covenant to instruct the apprentice fully in the mystery of his business does not, in consequence of this Act, oblige the master to send his apprentice to such lectures, &c. as are required, and whether a person remanded cannot recover by law from his quondam master the expenses incurred by such rejection.

The Act seems to render it imperative upon a licensed apothecary to keep a shop, at least he is liable to a fine, and even a revocation of his license, if he refuses to dispense the prescriptions of licensed physicians: this is in consequence of his original station of a *pastophorus* or *bedell* to the temples in which the physician acted as a priest; and was therefore entirely under his command, and punishable by his superior for misconduct. It may now certainly be regarded merely as a specimen of the waste of words used in legal Acts, which serve only to increase the expense of drawing them up, since apothecaries, or chemists and druggists, must be very scarce in a neighbourhood to oblige any physician to endeavour the putting of this clause in force.

It is certain that this Act, through the vigour communicated to it by the Society of Apothecaries, in rendering the examination as efficient as the time will allow, and making it necessary that three of the examiners should sign the certificate, or seven of them vote for the person under examination being remanded, has already had a good effect, by obliging young apothecaries to be more attentive to their studies than heretofore, through the fear of being remanded, and by bringing many to town who otherwise might not come, and must therefore be esteemed a benefit by all who have the honour of the profession at heart.

As to the monopoly contemplated by its original proposers, the surgeon-apothecaries (as they call themselves in imitation of their Scottish brethren), it is most probable that the Legislature will pause long before they throw the whole medical practice into the hands of one or two corporations, and especially those fettered with apprentice laws, which of necessity precludes them from receiving the accession of those who although bred to other professions, are led by the powerful impulse of genius to study medicine. At the same time it is perfectly equitable, and can be objected to by none, that those who go through the expense and labour of an initiation into these corporations, or a license from them, should

be protected from any one assuming their title, and practising under the implied supposition that he has gone through the same.

But in respect to the cant, for no other name can be given to it, of the danger of permitting home-bred and even unlearned empirics to practise medicine, it may be remarked, that as the higher classes of society require their usual medical adviser to possess their manners, so do the lowest; and although the poor may accept of the advice and medicines given them by practitioners who rank above them in society, yet they do it with a latent suspicion that they are made the subjects of experiments, and never cordially bestow their confidence but upon those of their own rank; nor is this peculiar to the poor in civil life, for Hamilton, in his *Regimental Surgeon*, mentions the reluctance with which soldiers report themselves sick and accept the proffered aid of their medical officers, choosing rather to purchase medicines out of their scanty allowance, and follow empirical advice, until overpowered by disease, and no longer able to conceal it.

As to the power of suppressing home-bred or even unlearned empirics altogether, the trouble and expenses of a lawsuit, and the obloquy that attends those who attempt to deprive a man of the fruits of his industry and skill through the want of technical formalities, are so great, that it is only the strong stimulus of personal enmity, or a feeling that their own interest is deeply involved in getting rid of a more popular neighbour, that would originate a prosecution; hence, while the grossest ignorance and real unskilfulness would escape, by being clothed in the garb of poverty, especially considering the facility with which the poor slip from the fangs of the law by changing their residence, as it would never be worth while in such case to hunt them out, even if it were possible, it is only the active and intelligent practitioner, like Sutton the inoculator, that would be prosecuted, because by his neighbourhood alone could prosecutors be injured, or from him alone could they look for a reimbursement of any portion of the expenses that must be incurred; and here the prosecutors would, as in Sutton's case, have to encounter every discouragement that could be put upon the affair, and have to fight their way through all the mazes and intricacies that the law could interpose, with a court and jury decidedly hostile to their claim, and requir-

ing the most positive enactments and evidence in their favour, and the want of success in any one lawsuit, or even the expenses of three or four, if so many were required, although they were successful, would outweigh any possible injury that could arise from letting the matter rest as it was.

Moreover, as to the real justice of attempting the forcible suppression of empirics, however mortifying it must be to the pride of the philosopher, or the intense labours of the scholar, truth will oblige the historian of the practice of medicine to confess, with a sigh over the vanity of human learning, that our choicest remedies, and our most approved modes of cure, are generally, if not universally, derived from empirics, and those the most unlearned; and that, however the methodics have laboured to explain the modes of action, and the reasons for the effects produced, they have done little or nothing towards the improvement of the practice.

The surgeon-apothecaries now inform us, that seeing the aversion of the Legislature to their proposal, they mean to collect all the information they can of the failures and errors of home-bred practitioners; this is perfectly right, but it ought to be accompanied with a confession of their own failures, that a fair comparison may be made. Because one empiric has been unsuccessful, or tried an experiment which has terminated fatally, for which he may be punished, it would be the height of injustice to endeavour to prevent others from practising that which seems to be the bounden duty of every man, the alleviation of the distresses of his fellow men, according to his ability, and which, as far as regards medicine, every old nurse in the world has exercised from time immemorial. Indeed no laws could prevent it, unless perhaps all medical writings in the vulgar tongue, the principal source of empirical information, were collected together, burnt by the common hangman, and strictly prohibited in future; or the sick, on the first accession of disease, torn from their friends, and shut up in pest-houses and lazarettoes. The attempt, if we may speak the truth, only tends to render the major part of the regular faculty suspected of real ignorance, which fears the collision of open competition, and seeks the protection of power to enable it to maintain the contest. It must be owned, however, that it is not a little mortifying to a practitioner, educated in the best medical schools, to see himself cast off for

the advice of an empiric, especially as this rejection is not confined to the soldier or the ploughman, but happens even in the palace, where although on the first accession of disease the school-bred methodic, who practises in a general way, is consulted, yet if the disease proves tedious, the confidence of the patient is shaken, and transferred to some empiric, perhaps the most unlearned of his tribe, whose medicines are taken and his directions followed with that implicit obedience and faith which had they been given in the first instance to the original practitioner would have had the desired success.

And it may be finally remarked, that the home-bred practitioner, although he is frequently ignorant, because his poverty and distance from the seats of learning oblige him to content himself with any old medical books that may accidentally fall in his way, yet he is not the enemy of the school-bred practitioner, and in general a paltry rival, because he scarcely practises except in remote villages, or upon the poor who cannot afford the attendance of a regular bred man, or in chronic cases which have been previously treated by the school-bred practitioner until the patience of the sick is exhausted. The real enemies of the fair practitioner, whether empiric or methodic, are those persons generally educated in what is called the regular method, who disdain the slow and gradual progress of industry and attention to business, endeavour to trample down their brethren, and thrust themselves forward to public notice in advertisements under real or fictitious names and titles, and thus make a great noise in the world, although, from the heavy expense of advertising, it is doubtful whether they really get as much money as they might obtain by pursuing the usual course: and still more those persons who, impelled by a commercial rather than a philosophic spirit, become nostrum-mongers, and, frequently in defiance of their better knowledge, recommend, in pompous terms, some inert or dangerous medicine to the notice of the sick, and thus encourage them to practise upon themselves. The most hazardous of all experiments, to which the rashest trials of the most ignorant village empiric, who derives the whole of his book-learning from a well-thumbed copy of some old black-letter herbal, are comparatively safe; since in the latter case there is some chance that his experience may enable him to perceive his error in time to retrieve it, and at the worst a salutary cau-

tion would be inculcated, and a repetition of the trial avoided.

The true method of combating this is not by soliciting harsh penal laws against practitioners who have not studied at certain schools, or who have not been devoted to medicine by their parents. For as the sick, disregarding the existing differences between the several ranks of the medical profession, will solicit the advice of those persons in whose knowledge they place confidence, the attempt only leads both practitioners and patients to invent modes of evasion, and widens the breach between the different branches of the profession. It would be better to throw the portals of the college and the medical schools wider open, and by rendering instruction cheap, invite the poorest descendant of Apollo and *Æsculapius* to join the aids of science to his long-cherished secrets, and seat himself among his more fortunate brethren. Unless this be done, the only mode is to let things take their own course, and rest content with simply securing their proper distinctions to those who have gone through the trouble of obtaining them, and on the other hand bestowing these distinctions only on those who merit them, leaving the sick and their friends perfectly at liberty to search for relief wherever they think it most likely to be found, thus creating an honourable competition and rivalry, instead of that continual bickering which at present pervades the different branches of the medical profession, as they may be well assured that the mass of mankind are not so blind as to be incapable of judging in a matter that so nearly concerns them as their health, or so inattentive to their own interest, as not to prefer those practitioners whose success in practice shall attest their skill.