



were seventeen associate or regular students and twenty-one occasional students. It is impossible to over estimate the importance of the work which is being done.

The *Pall Mall Gazette*, under the influence of morphia, says, in its issue of 31st ult. :—

“It may seem harsh to say so, but it is not only very desirable but absolutely necessary that we should before long hang a chemist—and we must add, the sooner the better. These men have taken to playing at life and death with their drugs in a manner which, assuming that human life has any sanctity left, is perfectly appalling. Scarcely a week passes by without a coroner’s jury returning a verdict of ‘Death by misadventure,’ the ‘misadventure’ being that some blundering chemist has poisoned a customer. The latest instance of this kind of misadventure is the death of a gentleman named Wall, living at Salcombe Regis, near Sidmouth, who sent the other day to a neighbouring chemist for a mixture containing a small quantity of morphia. The chemist put a *scruple* instead of a *drachm* of muriate of morphia into the mixture, the result of this little mistake being the death of Mr. Wall. The verdict at the inquest was of course and as usual, ‘Death by misadventure,’ the jury at the same time ‘admonishing’ the chemist to be more careful in future. It is hoped the chemist will have the kindness to pay some attention to this admonition. In the meantime, we may perhaps be permitted to admonish juries also to be a little more careful in future as to their verdicts. It is, of course, very painful to bring in a verdict of manslaughter or wilful murder against a brother tradesman, but juries ought to remember that it is no slight matter to muddle away human lives in this fashion. Many of us have wives and children dependent on our exertions for subsistence, and it seems hard that we cannot even send to a chemist for a tonic without a chance of our servant bringing back two pills of arsenic to be taken at night and a bottle of prussic acid in the morning.”

The *italics* are ours.

Some kind friend pointed out their ignorance of the subject, and a few days after they drift into further inaccuracy as follows :—

“In an occasional note on a recent instance of poisoning, the words ‘scruple’ and ‘drachm’ were transposed, so as to make it appear that the chemist had given the smaller instead of the larger dose; whereas, obviously, the reverse was the case.”

We think their best plan now will be to consult the nearest druggist’s apprentice, who will, we doubt not, at once put them right.

We have received many letters on the subject, calling attention to the one-sided mode of treatment. One writer remarks :—

“Some parties besides juries, who, at times may be called a little muddled—in this case it is plain that it is so. If every man is to be hung for a ‘slight mistake,’ I propose that the correspondent of the *Pall Mall Gazette* and a few others should be hung the same time as this unfortunate chemist—chemists, like correspondents, editors, and composers, are but mortal, etc.”

A STATUE to Sir Humphrey Davy is about to be erected in Penzance, the town of his birth. A working committee was formed some time since, and by the exertions of its members a sum of £500 has been raised in subscriptions. A very eligible site has been obtained from the Town Council, immediately in front of the Market-house and facing the main entrance of the town. The Messrs. Wills have been commissioned to execute the statue, and they have completed a model of heroic size (about seven feet high), which may be seen at their studio, 172, Euston-road. The statue is designed after Sir Thomas Lawrence’s portrait, painted for the Royal Society, and now at Burlington-house, but other portraits have been also studied, and the likeness appears to be happy. Sir Humphry is represented in the well-known

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Editorial Notes.

ALTHOUGH the report of the Science and Art Department in the year 1870 is not yet published, *Nature* believes that the following, amongst chief results, may be relied upon as accurate. The numbers who during 1870 have attended the schools, museums, and other institutions receiving Parliamentary aid, considerably exceed those of 1869. There is a very large increase in the number of persons receiving instruction in science applicable to industry, which has risen from 24,865 in 1869 to 34,283 in 1870, or upwards of 37 per cent. At the Royal College of Science, Ireland, there

costume of the portrait, a light overcoat flung back, with coat within buttoned over, and waistcoat with upright collar appearing above the latter, shorts, long stockings, shoes and buckles; the head is slightly thrown back as if inspired with the courage and enthusiasm for science which excited Coleridge's strong admiration for his friend; and the right hand rests on a safety-lamp, the product and symbol of the beneficent genius of the chemist. The total cost of the statue and of erecting it on the site provided is estimated at £600, and it is hoped that subscriptions will not be wanting to make up the small sum still required.

THE *Times*, in a recent article on Sanitation, speaks of Mr. Simon as "the hapless, but still hopeful Medical Officer of the Privy Council," and after alluding to the apathy of the public until disease is actually in their midst, says that if the doctor looks to the medical profession, even there he finds the universal law of selfishness still in his way. Doctors, apothecaries, chemists and druggists, all consult their own interest and safety, and Mr. Simon cannot even touch that fearfully weak point of our medical system—the one fatal link in the chain—which hands over the prescription of a first-rate physician to be made up by some one who cannot read hieroglyphics, who does not know one drug from another, and who would not taken much to heart the accidental death of a person he never saw.

EDINBURGH

BRITISH PHARMACEUTICAL CONFERENCE, 1871.

A GREAT writer, the writer of his age, has made it impossible for anyone to visit Edinburgh as a stranger. Indeed the whole reading world is personally familiar with every inch of Scottish soil. Glad were we, therefore, who longed to see Arthur's Seat, Holyrood, the beauty of modern Athens, and the glory of the North; to lay the flattering unction to our souls that we were ardent students in pursuit of pharmacy.

So it fell out, however, that in a most inconvenient, because early month, we found ourselves seated in Craigie Hall, St. Andrew-square, to listen to W. W. Stoddart, who has presided over the Conference for the last two years.

We cannot do better than reproduce the admirable abstract of the *Edinburgh Daily Review*:—

After congratulating the Conference on its continued success, the President went on to speak of the objects and results of pharmaceutical research. In the course of his remarks he said—"Pharmacy, in its true bearing, is one of the many offshoots of a scientific education, and cannot be properly cultivated and pursued without a fair acquaintance with several branches of natural science. Botany is doubtless, an important study, yet chemistry must ever be our chief ally. We may accurately describe the characters of the Asiatic poppy or the Peruvian cinchona, and yet be sadly at a loss if we know not how to extract the morphia and quinia. How is it that so many of our extracts, infusions, and syrups are inert, while the plants from which they are prepared are so powerful and poisonous in their action on the animal economy? Why so many prescriptions oftentimes rendered valueless? Surely because the medicines have been rudely prepared, or, as not unfrequently happens, the prescriber brings together in the prescription, substances that ought to be kept as widely apart as the poison cupboard and the retail department.

Those four wonderful elements, of which all organized bodies are composed, must be carefully tended and watched, and their several likes and dislikes known, before the pharmacist can elaborate the various medicamenta in their perfect forms. To profitably carry on our business we must copy nature in all her operations. As in hers so in our own laboratories, nothing should be lost and nothing wasted. The pharmacist should strive as strictly to account for every atom or molecule in his transformations or substitutions as for the £ s. d. in his cash book. Like all other callings, our own has arrived at its present state by very slow degrees; its foundation was laid on the alchemy of the Arabians and the empiricism of the Greeks. Its superstructure was built up *stratum super stratum* by the persevering study and steady observation of the inhabitants of Great Britain, France, and Germany; while our American brethren have made a good start, and with their characteristic zeal have shown, by their various publications, a practical acquaintance with pharmaceutical operations. Let us, therefore, look after our laurels, and let it not be said by our children and theirs that we have delayed our march on the high road to knowledge. I cannot look around me at the present moment without the proud conviction that we have an earnest band of inquirers, who have met together at this our annual gathering for the purpose of receiving and imparting the results of their experience and observation. Variety is a common natural ordinance, quite as much so in ourselves as in the flowers of the field. The cry of 'equality' which we sometimes hear is a fatal delusion and the dream of a fanatic. We each must humbly play our own peculiar part in one harmonious whole. *Non omnes omnia possumus*. Perhaps of all the discoveries which modern chemistry has introduced, the most marvellous are the methods of analysis and synthesis of the organic bases. It is true that we cannot produce in our laboratories the root of the madder or valerian, the sugar-cane or the Tonquin bean, but we can manufacture alizarine, valerianic acid, sugar and coumarin. No more startling proof of the advancement of synthetical chemistry can be adduced than the discovery alluded to by Mr. Perkin at the last meeting of the British Association, in his paper on the artificial preparation of alizarine. Who could have supposed that there was the least relationship between two such dissimilar bodies as cinchona bark and gas tar; nay, more, that they should rise to the same substance? Yet so it seems to be. You are, of course, all aware that the cinchona barks contain the alkaloids in combination with quinic acid, which is also found in the coffee, bilberry, holly, privet, oak, ash, elm, and many other plants. Thirty-three years ago, Woskresensky, while experimenting on quinic acid, found that when it underwent oxidation, a peculiar yellow crystalline substance was the result, and to which he gave the name quinone. For many years the atomic constitution of quinone remained a disputed question, till the researches of Graebe showed that it was a substitution product from benzol, in which two atoms of hydrogen were replaced by two of oxygen. In 1869, Messrs. Graebe and Liebermann found out that from a compound of anthracene and quinone, both of which are present in coal-tar, was formed anthraquinonic acid, better known as alizarine. It is the first instance of a vegetable colouring matter being produced by artificial means. An equally strange discovery has been made by Mr. Broughton, the Government quinologist, who has extracted carboic acid from the *Andromeda Leschenaultii*, a plant growing freely on the Neilgherry Hills. It is said to be of far greater purity than that made from coal-tar, but probably the cost of production will prevent its coming into general use. Since we last met, pharma-

ceutical chemistry has lost an able investigator by the lamented death of Augustus Matthiessen, who, in conjunction with Messrs. Foster and Wright, was making a very considerable addition to our knowledge of the constitution of the opium alkaloids. For many years past these have been a complete puzzle, and never till now had we any light thrown upon the reason why the poppy capsule should contain such a surprisingly long list of different principles. Happily the experiments on the substitution products of morphia and codeia are being continued by Dr. Wright, who is assiduously working out the subject." After giving some details of these experiments, Mr. Stoddart continued—"Mr. D. Howard has described a new cinchona alkaloid, which he detected by noticing an unusual loss when recrystallising quinia. The new base is still under investigation, but seems to be nearly related to quinia, for its oxalate only differs by containing three more molecules of water. Chlorine and ammonia also produce the green colour and precipitate of dalleiochin, which is characteristic of quinia and quinidin. It differs, however, by the solution not being fluorescent. Chloral hydrate appears now to have become a recognised addition to our *Materia Medica* as a good hypnotic. It may, however, be well to note that a comparatively large number of deaths have occurred from its use during the past year. In every case the fatal result has arisen from one of two causes—either from an overdose, or else by the dose having been repeated too frequently, one having been swallowed before the effect of the previous one had passed away. Professor Wurtz has stated to the French Academy of Sciences, that the nitrate of strychnia, used hypodermically, is an antidote to the poisonous effects of chloral. I have not, however, seen a confirmation of this strange announcement. Anæsthetic agents are still the subjects of much discussion. Bichloride of methylene and nitrous oxide have been tried over and over again by their respective admirers, but the weight of evidence seems to be in favour of the latter. The bichloride has too frequently induced nausea, a most distressing accompaniment to its administration, while the nitrous oxide appears to give almost universal satisfaction. Not one fatal accident has happened, although, within the last twelve months, it has been in daily use by dentists. New localities have been successfully tested for the cultivation of the poppy and cinchona plants. At the January meeting of the Pharmaceutical Society, a paper by Mr. Ward was read on a sample of Australian opium, collected in Gipps land, and sent to Mr. Hills, for examination. It contained no less than 9 per cent. of morphia, so that the Australian climate may eventually prove favourable to the growth of the poppy plant. In America, also, the production of opium has been tried as a profitable speculation. Mr. Wilson, of Vermont, has sown 6½ acres of land with opium poppy-seed. From the resulting crop were gathered 640 lbs. of opium, averaging 6.25 per cent. of morphia, and realising 10 dols. per lb. In Ceylon the cultivation of the cinchona has attracted considerable attention. The analysis of a sample sent to England showed that each pound of the bark yielded 289 grains of sulphate of quinia, forty-seven grains of quinidine and fourteen grains of cinchonine. Our excellent secretary, Dr. Attfield, with his usual aptitude for the practical application of his favourite science, has given an exhaustive paper on a proposed new nomenclature for universal adoption in future editions of the *Pharmacopœia*. The continual changes that have hitherto taken place, and the consequent increase of synonyms, are often a cause of much perplexity to the dispenser. I hope that the doctor's suggestions may be fully considered by future compilers of the next editions of

our own as well as those of other countries. We should then be unanimous, and travellers would have less difficulty in getting their prescriptions prepared. In the provinces, pharmaceutical education is gaining ground more and more. Papers read at meetings of the several associations throughout the country show that private study and the number of students are rapidly increasing. In America, pharmacy seems to be prosecuted with more than usual vigour. Those of us who have been accustomed to peruse the foreign publications must have painfully missed those from Paris. The horrid transactions and frightful display of human depravity in that city must have rendered scientific research impossible. In the present day we, as Britons, must put forth our best energies lest we fall into the rear of intelligent nations. Our young men are justly, though tacitly, making an urgent appeal for our help. We do not, of course, press them to join our ranks; but when they ask to be admitted and we do receive them, we are not doing the thing that is honest if we fail to show the greatest solicitude for their welfare. The act of taking a pupil or apprentice is now one of very grave responsibility. When we sign an indenture we there and then become answerable for the proper education of that pupil, either by personal supervision or by securing the services of some substitute. Nay, I go further; my own impression is, that no one ought to take a pupil unless fully competent to answer most of the many questions that crop up in the mind of an earnest student, or else to show him how to get the desired information. On the other hand, I think that a lad who has not received a good solid education is not the one to be a pharmaceutical pupil. His time then becomes too valuably occupied to be wasted in procuring the exceedingly little knowledge requisite for passing the preliminary examination. We often hear it said that a youth has a good education because he is tolerably conversant with Colenso and Morell. This is a very common mistake. It is not education. Professor Huxley has justly reminded such an one that reading, writing, and arithmetic are only the means whereby we are enabled to open the educational casket. Appropriate food is as necessary for the mind as it is for the body. If we choose to feed our mental powers on the trashy material that is often miscalled literature, we cannot expect to have a healthy appetite for that which is good and worth remembering. What is it that prevents so many of us feeling a delight in researches of others, or searching for ourselves? It is nothing less than mental dyspepsia and intellectual debility. Example is far better than precept, and we cannot expect our pupils to acquire a keen relish for mental cultivation, or believe it to be necessary, if they see that we ourselves care so little and become so apathetic. It is no drudgery or hard work that we recommend, but a pleasant relief from the monotonous routine of a chemist's life. The test-tube or the microscope, the herbarium or the pencil, will soon enough reward the trial with the substitution products of pleasurable surprise and wonder." Mr. Stoddart concluded with a complimentary reference to the services of Dr. Attfield and Mr. Ince in preparing the Year-book, and with thanks to the Conference for having a second time elected him as President.

Professor ATTFIELD read the Annual Report, as follows:—"During the past year the Association was largely increased in numbers, usefulness, and general prosperity. The committee has held six meetings, at which a variety of business, relating among other matters to the printing of the Year-book, was disposed of. As a result of the labours of the committee, the efforts of the local secretaries and the kindness of individual members, about three hundred new names have been added to our roll since last autumn. The total number of members is now 1,917. From these figures,

however, there must be deducted—losses by death, 8; resignations, 14; untraced removals, 6; and members whose subscriptions are more than two years in arrears, 11—total 39. This gives an effective strength of 1,878. The Executive Committee congratulates the Conference on this high number, but would urge on every member the importance of using his utmost efforts in obtaining recruits. The production of Year-books, without intermission, can only be secured by the united contributions of at least two thousand members. A much larger number than this may fairly be anticipated as the objects of the Conference become more widely known and more fully appreciated. 'The Year-Book of Pharmacy' for 1871, is in a forward state. Every liability for the eighth Conference year—July 1, 1870, to July 1, 1871—has been discharged, and there is a balance in hand of £50. The sum is less by £40 than that remaining at the end of last year, but several exceptional expenses have been incurred, hence the committee hopes that the income of the present year will meet the expenditure—a result that will certainly ensue if members will kindly obtain additional subscribers."

The report had the double merit of being short and satisfactory. Brighton had previously been fixed on as the next place of meeting. At the conclusion of the two days' session, Mr. F. B. Bengel was elected one of the General Secretaries in the room of Mr. Richard Reynolds, whose retirement is so much regretted; Mr. Schacht was re-appointed Treasurer, and Mr. H. B. Brady, F.L.S., became the President elect, a choice which will give unmingled satisfaction to all who have the interests of pharmacy at heart.

The papers, though few in number, owing to the discussion to which some of them gave rise, exceeded the limited time at disposal; the "Preparation of Liquor Bismuthi," by C. H. Wood, and "Pharmacopoeial Nomenclature," by C. R. C. Tieborne, were both taken as read. It will be allowed on all hands that those contributed were of high character, and the Secretaries may rest satisfied with the programme which they had to offer.

First in order, as also as an illustration of research, came the communications of Dr. Wright.

I. Oxidation Products of Essential Oil of Orange Peel.

II. New Derivatives from Codeia.

The latter was of extreme importance, and its reading will serve to give a tone to the proceedings of the Conference.

Mr. BRADY said that this paper came with peculiar fitness to Edinburgh, which, as they all knew, was the seat of the morphia and codeia manufactory. He wished to refer to the liberality of the Edinburgh morphia manufacturers of opium alkaloids in helping scientific men in researches. When Mr. Deane and himself were making researches in opium alkaloids, he had occasion to apply to Messrs. Smith and Messrs. Macfarlane, Edinburgh, to save themselves the task of making small quantities, and he could not refrain from testifying to the extreme kindness of these firms in supplying him and Mr. Deane with everything they wanted—not as matters of business, but from their interest in scientific research.

Next to be noticed was a report on the Chloral of Trade, by A. H. Mason, F.C.S., together with a note on Chloral Hydrate, by M. M. Pattison Muir, F.C.S. A hot discussion ensued, Mr. Wood's opinion being that what was wanted chiefly was a means of testing chloral, so as to recognise the presence of chloral substitution products. The general verdict was that commercial chloral hydrate was well prepared.

On Wednesday the order of the day began with a paper on the "Crystalline Principle of Aloes," by Professor Flückiger, M.D., Bern, the English manuscript having been

submitted to the care of Daniel Hanbury, F.R.S. Placed in such hands we need not point attention to the excellence of the result. As its immediate successor, followed a paper, the commencement of which gave promise of much practical interest. Speedily it degenerated into an unflinching trade circular. The style, without exaggeration, may be paraphrased as follows:—"Gentlemen, I have for years been a sufferer; I have tried various remedies, and even different makes of aloin, when, happily, I met with your invaluable preparation—please send another bottle." Pharmacists who read papers should leave the shop at home, and not rake up testimonials about their special wares.

Brightly in contrast was a solid, well worked out contribution towards the history of linseed meal, by Mr. Thomas Greenish, F.C.S. Its whole bearing is so practical, that with the author's permission, we have transferred it to our columns. Time pressed, and members grew somewhat impatient, though at the very last Mr. S. R. Atkins read a short, but admirable notice on "Apprenticeship." Relative to this matter, the practice in Scotland and England differs so essentially that we are unwilling to mar the subject by any mere passing observations. The Scotch system appears to us about a century in advance of that pursued this side the Tweed. We respectfully invite more detailed information from competent friends in Edinburgh and Glasgow. Brief as the discussion was, it gave Mr. Schacht the opportunity of explaining his theories in that graceful diction which he has taught us to expect, and in which we are never disappointed.

Little more we have to say. The *conversazione* was held in the Museum of Science and Art, one amongst the guests being the Emperor of Brazil. Band and pipe music was performed during the evening's entertainment, and there was a numerous assemblage.

On Thursday a complimentary dinner was given by the resident members, at Macgregor's Royal Hotel, to the President and officers of the Conference. The singing was excellent, and judging from a short after dinner speech to which we listened, we congratulate the students of the October session on the treat to which they may confidently look forward. Here we must stop—not before, however, in the name of the visitors, we thank heartily and sincerely Mr. H. C. Baidon, Mr. John Mackay, and the gentlemen of Edinburgh, for the kindness, courtesy, and abundant hospitality they so liberally displayed. Happy is it when pharmacy can be so efficiently represented.

BRITISH PHARMACEUTICAL CONFERENCE.

Eighth Annual Meeting, Edinburgh, 1871.

OFFICERS.

President:—W. W. Stoddart, F.C.S., F.G.S., Bristol.

Vice-Presidents, who have filled the office of President:—H. Deane, F.L.S., Clapham Common, S.W.; Professor Bentley, F.L.S., M.R.C.S., 17, Bloomsbury-square, W.C.; D. Hanbury, F.R.S., F.L.S., Clapham Common, S.W.

Vice-Presidents:—J. Abraham, Liverpool; H. C. Baidon, Edinburgh; J. Ince, F.L.S., F.C.S., London; J. Williams, F.C.S., London.

Treasurer:—Georgo F. Schacht, Clifton, Bristol.

General Secretaries:—Professor Atfield, Ph.D., F.C.S., 17, Bloomsbury-square, W.C.; R. Reynolds, F.C.S., 13, Brig-gate, Leeds.

Assistant Secretary:—James Collins, F.B.S.E.

Local Secretary:—John Mackay, F.C.S.

Editor of the Year Book:—C. H. Wood, F.C.S.

Editors of the Transactions:—The Secretaries.

Other Members of the Executive Committee, 1870-71:—F. B. Bengel, Manchester; G. Blanshard, Edinburgh; H. B. Brady, F.L.S., Newcastle-on-Tyne; M. Carteighe, F.C.S.,

London; E. Davies, F.C.S., Liverpool; T. B. Groves, F.C.S., Weymouth; W. Martindale, F.C.S., London; H. Matthews, F.C.S., London; F. Sutton, F.C.S., Norwich.

Auditors:—H. S. Evans, F.C.S.; J. F. Robinson.

Local Committee for Edinburgh:—H. C. Baildon, Chairman; G. Blanshard, Vice-Chairman; W. Ainslie and J. R. Young, Treasurers; J. Mackay, F.C.S., Secretary; W. Aitken; D. R. Brown; T. Finlayson; T. Fairgrieve; W. Gilmour; J. Gardner; D. Kemp; G. H. Laird; J. Mackenzie; S. Macadam, Ph.D., F.R.S.E.; A. Napier; J. Nicol; J. Nesbit; R. Raimes; J. Robertson; T. Smith; J. Simpson, W. Tait.

The sittings of the Conference were held in the Craigie Hall, 5, St. Andrew's-square, on Tuesday and Wednesday, August 1st and 2nd, commencing at 10 a.m. each day.

The attendance of the members was larger than usual—about one hundred being present. The chair was occupied by W. W. Stoddart, Esq., F.C.S., F.G.S., Bristol, who has been elected for the second time president of the Conference.

DELEGATES.

The following gentlemen were in attendance as delegates from various societies:—Messrs. Savage and Schweitzer, Brighton; Messrs. Schacht and Stoddart, Bristol; Dr. Edwards, Messrs. Shaw and Mason, Liverpool (Dr. Edwards also represents the Pharmaceutical Association of Quebec); Messrs. Bell, Myers, Hull; Mr. B. Bengier, Manchester; Messrs. Fraser, Kinninmont, Davison, and Fairlie, Glasgow.

PLACE OF MEETING FOR 1872.

A preliminary meeting was held at the Town Hall, Brighton, to make arrangements for the ensuing year. Professor ATTFIELD attended, and explained the general objects of the Conference.

There were also present T. A. Brew, Esq. (President), Mr. J. Schweitzer (Secretary), Messrs. Cornish, Davids, Edwards, Field, Glaisyer, Gwatkin, Merrett, W. D. Savage, and Smith. The first resolution was a renewal of the invitation to the Conference, to be conveyed to Edinburgh by a deputation consisting of Messrs. Schweitzer and W. D. Savage; to appoint a vice-president, a local secretary, and a member of the Conference Executive Committee. Messrs. W. D. Savage, T. Glaisyer, and W. Smith were respectively appointed.

In consequence, Mr. SCHWEITZER informed the Edinburgh members that he had been instructed by the Association at Brighton to offer the Conference a hearty welcome if they paid a visit there next year.

The CHAIRMAN said that, knowing the Conference would meet next year at Brighton, the Association might take it for granted that the members of the Conference would accept the hospitality of the Brighton Association. He was sure they would all be of opinion that they ought to accept the kind invitation made by Mr. Schweitzer. (Applause.)

ANNUAL REPORT IN DETAIL.

Professor ATTFIELD (one of the general Secretaries) read the annual report of the Committee as follows:—

The President and Executive Committee once more have to report to the members of the British Pharmaceutical Conference that during the past year the Association has largely increased in numbers, usefulness, and general prosperity. Nearly two thousand names are on our books, each member has been presented with a copy of the Year-Book, and the treasurer's statement shows a balance in hand of £50.

Meetings of the Executive Committee.—During the past year our committee has held six meetings.

On Oct. 5th, 1870, after some matters of detail relating to the Liverpool meeting had been disposed of, a formal vote of thanks was conveyed to the Chairman, Secretary, and other members of the Liverpool Local Committee, for the judicious, liberal and successful manner in which they had advanced the objects of the Conference. Mr. James Collins was then appointed to give evening assistance to the metropolitan Secretary, in keeping the books of the Conference, issuing circulars, and acknowledging subscriptions; the post being made tenable for one year at a salary of twenty-five pounds. Messrs. Carticghe, Groves, Hanbury, Ince, and Stoddart, with Professor Attfield as secretary, were reappointed a Committee to superintend the publica-

tion of the Year-Book of Pharmacy. At this meeting eleven candidates were elected to membership.

On December 7th, 1870, two long reports of business transacted by the Year-Book Committee, on October 19th and 20th, were read, discussed and adopted. The continued illness of Mr. Brough had rendered imperative the appointment, by this sub-committee, of a joint editor, an office which Mr. Joseph Ince had, after some persuasion, consented to accept. The executive confirmed the action of the sub-committee. Arrangements were then made for the distribution of the Year-Book to members. Ten gentlemen were elected to membership.

On February 1st, 1871, the labours of local treasurers and the courtesy of London merchants, in conveying parcels of the Year-Book gratuitously, were duly recognised and recorded. Plans for obtaining an increased number of members, with the view of securing sufficient funds to continue the publication of a Year-Book, were introduced by the Secretary, and fully discussed. At a previous meeting, the executive committee had accepted, with much regret, the resignation of Mr. John Cargill Brough, as editor of the Year-Book. The sad state of Mr. Brough's health rendering any resumption of editorial work impossible, invitations to apply for the appointment had been issued, and responded to by three gentlemen. After due deliberation, the committee elected Mr. Charles H. Wood, F.C.S., to the vacant post. Mr. Daniel Hanbury, F.R.S., and Professor Attfield were requested to revise the list of gentlemen, societies, and journals, receiving presentation copies of the publications of the Conference. The financial position of the Conference was considered at this meeting. The following proposition was carried unanimously:—"That the cordial thanks of the executive committee be conveyed to Mr. Joseph Ince for his valuable services in editing, at a very brief notice, and at much personal inconvenience, the 'Year-Book of Pharmacy for 1870.'" Fifty-three candidates were elected to membership.

On May 16th, 1871, the London Secretary reported on the distribution of the Year-Book, described the difficulty, labour and expense connected therewith, and proposed that in future the volume should be sent by post direct from the printers to each member who had paid the annual subscription (5s.) and sixpence in addition for postage (total 5s. 6d.) The committee instructed the secretaries to carry out this plan during the succeeding year. The secretaries were empowered to issue a new form of nomination and a new specimen page of the Year-Book. The estimates of Messrs. Butler and Tanner for printing, and Messrs. J. and A. Churchill, for publishing, a second Year-Book, on terms similar to those under which that for 1870 was produced, were accepted. The report of the sub-committee on presentation copies of the Year-Book having been read and adopted, a resolution was passed, "That a copy of the Year-Book shall be offered to each provincial pharmaceutical association having a library." A list of subjects suggested for research was laid before the committee, and Messrs. Williams, Groves, and Attfield appointed to revise the same before its distribution to members. Eighty-one gentlemen were elected to membership.

On July 5th, 1871, the secretaries reported that since the previous meeting of committee the following documents had been posted to each of the one thousand eight hundred members:—(a) the list of subjects suggested for research, together with (b) two nomination papers, (c) a specimen page of the Year-Book, and (d) a letter requesting members to obtain candidates for election; another letter (e) and other invitation papers had been sent to four or five hundred gentlemen likely to join the Conference. The Annual Circular (f) relating to the general meeting for 1871, and, an enclosure (on behalf of the Edinburgh Local Committee) of (g), a card of invitation to a *Conversazione* have also been recently forwarded. The Report of the Year-Book Committee relating more especially to the arrangement of matter in the Year-Book was received and adopted. At this meeting of the committee one hundred and forty-eight gentlemen were elected members.

Finally, on July 31st, your committee met in Edinburgh to arrange business for the present meeting, and to elect sixty-four members.

Number of Members.—It will thus be seen that as a result

of the labours of your committee, the efforts of local secretaries and the kindness of individual members, about three hundred new names have been added to our roll since we assembled last autumn. The total number of members is now 1,917. From these figures, however, there must be deducted, losses by death, 8; resignations, 14; untraced removals, 6; and members whose subscriptions are more than two years in arrear 11; total, 39. This gives an effective strength of 1,878. The Executive Committee congratulates the Conference on this high number, but would urge on every member the importance of using his utmost efforts in obtaining recruits. The production of Year-Books, without intermission, can only be secured by the united contributions of at least two thousand members. A much larger number than this may fairly be anticipated as the objects of the Conference become more widely known and more fully appreciated.

Amongst those whom death has taken from us there occur the following:—Mr. Gissing, of Wakefield, whose name is appended to the original circular inviting gentlemen to join the Conference then about to be inaugurated at Newcastle-Tyne in 1863; Mr. Tuck, of Oxford, five of whose papers appear in our *Transactions*:—1, "Mistura Creosoti;" 2, "Iodo-hydrargyride of Potassium, and the Oxidation Tests for Methylic Alcohol;" 3, "Test for Methylic Alcohol when mixed with Ethylic Alcohol;" 4, "Detection of Methylic Alcohol in Chloroform, Ether, Sweet Spirit of Nitre and Sal Volatile;" and 5, "On Eschwege's Patent Wood Spirit;"—and Mr. Quiller, of London, a name well known in pharmacy.

The Bell and Hills' Fund.—A second grant of ten guineas' worth of books has been made by your committee in accordance with the intentions of the benevolent founder Mr. Thomas Hyde Hills. Fourteen appropriately-bound volumes of recent works, not already in their library, were presented to the Liverpool Chemists' Association, and duly acknowledged. A similar present will be offered to the library of the North British Branch of the Pharmaceutical Society.

The Year-Book of Pharmacy for 1871, the second issued, is in a forward state; indeed the editor has laid on the table the manuscript of the work. As soon as the proceedings of the present meeting can be reported, the whole of the volume will be placed in the hands of the printers, and when published, a copy forwarded by post to members.

The Financial Position of the Conference.—Lastly, your committee would draw attention to the treasurer's statement of accounts. Every liability for the eighth Conference year—July 1st, 1870, to July 1st, 1871—has been discharged, and there is a balance in hand of £50. This sum is less by £40 than that remaining at the end of last year; but several exceptional expenses have been incurred, hence your committee hopes that the income of the present year will meet the expenditure; a result that will certainly ensue if members will kindly obtain additional subscribers.

The Treasurer in Account with the British Pharmaceutical Conference, 1870-1871.

Dr.			
To Cash in hand, July 21st, 1871	£	s.	d.
.. Sale of Year-Books	96	10	9
.. Advertisements in Year-Book	11	10	0
.. Members' Subscriptions	58	1	0
	401	11	11
	£567 13 8		
Cr.			
By cost of 2,000 Year-Books:—	£	s.	d.
Editing, Mr. Brough (balance of £50)	15	0	0
.. Mr. Inco	50	0	0
	65 0 0		
Printing, Butler and Tanner	221	0	0
Binding	75	0	0
Woodcuts	1	10	0
Publishing, J. and A. Churchill:—			
25 per cent. Commission on Advertisements	14	10	3
Advertising	2	2	0
Addressing and Wrapping	6	18	6
Delivering 1,100 Year-Books for enclosure	9	3	4
Postage and Booking	2	1	6
Postage and Booking by Secretary	10	0	0
	407 5 7		
.. General Printing:—			
Taylor and Co.	18	13	0
Butler and Tanner	12	8	6
Marples	5	7	0
Sheldon	1	10	0
	37 18 6		

Brought forward	£	s.	d.
By Advertising	445	4	1
.. Stationery	0	10	0
.. Addressing Circulars	2	2	11
.. Salary to Assistant-Secretary (3 quarters)	10	4	0
.. Postages and Telegrams	18	15	0
.. Post-office charge for cashing stamps	33	7	5
.. Various petty expenses	3	4	3
.. Balance in hand	4	6	0
	50	0	0
	£567 13 8		

1871.	£	s.	d.
July 1st, Balance in hand	50	0	0
Estimated Arrears of Subscriptions up to June 30th, 1871	20	0	0
	£70 0 0		

Copies of Year-Book of 1870 in Stock, 200.

Bell and Hills' Library Fund, 1870-1871.

To Cash in hand	£	s.	d.
By Books forwarded to Liverpool	42	0	0
	10	10	0
	£31 10 0		

Examined and found correct,
H. S. EVANS, London.
J. F. ROBINSON, Liverpool.

The CHAIRMAN said this might be a proper time for proposing for election as honorary members Dr. Maisch, of America, and Dr. De Vrij, of the Hague. Both these gentlemen were well known to them all, and he proposed that they be elected honorary members. (Applause.)

The proposal was unanimously agreed to.

Mr. W. AINSLIE had much pleasure in moving the adoption of the report. It must be very satisfactory to those gentlemen who had originated the Conference to find that its affairs were in such a flourishing condition, and as there had been a great many members added during the past year, he trusted a larger number would be added next year, so that they might be able to circulate the Book of Pharmacy to the members of the conference without loss.

Mr. FRASER, in seconding the motion, said it seemed to be a very small sum that was wanted, so that even though they did not get so many members as they expected, they might easily raise the necessary amount to pay the expense of publishing and circulating the Book of Pharmacy.

Professor ATTFIELD thought there would be no difficulty in getting the money if they could get members. He had asked several people to join the Conference, and had never been refused.

After the reading of the address, an abstract of which has already been given,

Mr. D. KEMP said he had listened with very great pleasure to the address of their president, and he was quite sure he was merely expressing the feeling of every one present when he said that they were under very great obligations to Dr. Stoddart for the very able, clear, and succinct manner in which he had noticed the many new and important discoveries. He had sketched out for each one of them, if they desired to become acquainted with the subjects referred to in the address, a large and important study. He had noticed in his address the importance of practical pharmacy. The time was when pharmacists were content with mere practice—mere routine. That had now, he thought, greatly given way, and it was universally admitted that if practical pharmacy was to advance to anything like perfection, it must have a scientific basis. He thought this principle had now taken root. The very existence of this Conference was an evidence that scientific pharmacy was now carefully studied, and he had only to point to the very large meeting they had then present as another proof of this. He desired in their name and his own to express to the president their hearty thanks for his excellent address. (Applause.)

Mr. YOUNG seconded the motion.

Mr. H. DEANE, F.L.S., London, ex-president of the Conference, cordially concurred in the motion. It was a rare thing for them to have such an address placed before them. (Applause.)

The CHAIRMAN thanked the Conference for their approval of the address. It was no work to him to prepare it, but a real pleasure. (Hear, hear, and applause.)

PAPERS BY DR. WRIGHT.

Dr. WRIGHT, D.Sc., was then called upon to read a paper

he had prepared, entitled "Oxidation Products of Essential Oil of Orange-peel." He also read a short paper on "New Derivatives from Codeia."

In reference to the first of these, the Chairman said it was a proof that Professor Wright was working in the right direction. Referring to the second paper, he said that those who were conversant with chemical experiments had found with surprise how many different products existed. Dr. Wright showed them how easily they might have hundreds of different products.

In connection with this paper, Mr. Brady alluded to the extreme liberality of the Edinburgh manufacturers. Dr. Wright warmly concurred, and returned thanks to Messrs. Macfarlane for a liberal supply of alkaloids for the prosecution of his researches.

PAPERS ON CHLORAL.

Two papers relating to this product were then read—one by Mr. A. H. Mason, F.C.S., being a report on the chloral of trade; and the other by Mr. M. M. Pattinson Muir, F.C.S., on hydrate of chloral.

As Mr. Pattinson Muir was unable to be present at the Conference, owing to sudden illness, his paper was read by Professor Attfield. This paper gave the results of a number of experiments with hydrate of chloral, all of which went to show generally that the hydrate of chloral sold by chemists is of a fair pharmaceutical purity.

Mr. C. H. Wood, though he should probably run counter to the general tide of opinion, felt that he must venture to protest altogether against the chloroform test. It appeared to him that this was leading them astray, and was likely to do them more harm than it had done good. No doubt it had been very valuable and useful for the purposes suggested by Mr. Williams, but what they required at present, he believed, was a means of recognising that they had chloral hydrate and chloral alcoholate. They had a more efficient and much simpler means for doing that now. Leven's test enabled them to recognise chloral alcoholate by applying this chloral test; the chloroform test was not, therefore, required for that purpose, and it did not appear to him that it afforded a sufficient means of testing the purity of hydrate of chloral in other respects, because the presence of more or less water in the chloral hydrate was not of much importance to them, and merely affected the commercial value of the article. What they wanted, therefore, was a means of testing chloral so as to recognise the presence of chloral substitution products.

Dr. PAUL expressed his satisfaction with Mr. Wood's remarks. He had looked at the matter from the chemist's point of view, and raised a very important point. He hoped, and he was sure every one present would wish, that by next conference Mr. Wood would exercise the abilities and opportunities he was known to possess in carrying out the inquiry in this matter, so that he might be able to place before them, when they met again, some more positive information on this subject. (Hear, hear.)

Mr. CARR asked whether pure chloral could be detected by smell?

The CHAIRMAN said the sense of smell would never be sufficient to serve for a chemical test, although it was well known that when a bottle of chloral was opened it had a pungent smell. He thought the discussion on this paper had been very satisfactory.

BHAMNUS FRANGULA.

Mr. H. C. BAILDON read a letter describing Black Alder Bark, which, he said, might be prepared for use by boiling down three or four drachms in a pint of water, till the water only measured half a pint. This bark was apparently to be found most plentifully in Holland, as it was sold there very cheap.

The Conference adjourned at half-past twelve till two o'clock.

AFTERNOON SEDERUNT.

When the Conference re-assembled, Mr. C. A. STAPLES read a paper on "The Compound Iron Mixture of the British Pharmacopœia." Some remarks were made on this paper, after which Professor Allen, F.C.S., read a "Report on the Purity of the Permanganate of Potassium of Pharmacy."

REMEDY FOR HYDROPHOBIA.

A paper by Mr. Henry Groves, Florence, was then read by Professor Attfield, "On the Use of Blistering Flies in Hydrophobia."

It was as follows:—"The paper on Chinese blistering flies, by Dr. F. Porter Smith, recently published in the *Medical Times and Gazette*, mentions the employment by Chinese practitioners of blistering insects in cases of hydrophobia; and as I am not aware of the remedy being similarly used in Great Britain, it seemed to me that further attention should be paid by qualified men to a medicine which has a certain repute in several parts of Europe for curing the bites of mad animals. Dr. Grianowski, of this city, kindly informed me of its use in Russia and Greece, and has supplied me with information on the subject. It appears that about thirteen or fourteen years ago a certain Nikititich Levachoff, of Peklitz (Government of Riazan, Russia) created a sensation by his cures of hydrophobia. His arcanum was supposed to be the *Cetonia aurata*, or rose beetle. The monks of Phaneromens, near Eleusis, Greece, use the insect *Milabris bimaculata*, with equal parts of the leaves of *Cynarum excelsum*, in doses of fifteen grains of the mixed powder; at the same time they cauterise the wound with boiling oil. The physician of the late King Otho of Greece often gave half-grain doses of cantharides, until symptoms of incipient gastroenteritis declared themselves. Here in Tuscany there are one or two persons who are reputed to be able to treat successfully the bites of mad animals, by means of a nostrum whose basis is supposed to be cantharides or other insects with blistering properties, and it appears that their efforts are not unavailing, inasmuch as a medical man, to my knowledge, was convinced of the efficacy of the remedy, and caused a number of bottles to be prepared by one possessing the secret, and forwarded them, with a memoir, to the Academy of Medicine at Paris. As the box containing the remedy must have arrived at its destination but a short time before the breaking out of the recent war, it is probable that the whole matter has been set aside and forgotten. Speaking of the remedy to the physician, I suggested to him that it contained cantharides, to which he assented, or supposed that at least some blistering fly entered into the composition, and it then occurred to me that I had once copied an ancient recipe for hydrophobia, and that out of curiosity I had retained a copy for myself. Probably the two compounds are identical. The formula in my possession was represented as a secret left by S. Donnino to the family of Boccaccio, and is represented by the following translation:—"Secret for curing the bites of mad dogs.—Take 54 grains cloves, 54 grains cinnamon, 1 drachm 36 grains of pepper, 27 grains cantharides; mix according to age—from twenty-five years and upwards, 26 grains; for twelve years, 19 grains; for ten years, 24 grains; for four years, 6½ grains; for two years, 3½ grains. It may be taken from the day of the bite up to twenty-five days after. The remedy must not be administered to pregnant women. It is to be taken in one dose, according to age, as is marked above; in wine, broth, or water, according to the taste of the sick person. It must be administered fasting, and the patient should not eat anything for at least four hours, and during this time should take a great deal of exercise, in order that the remedy should act the more. The patient will suffer strong pains in the head and kidneys, besides other inconveniences, even to the passing of bloody urine, should the dog have been really mad, and the blood have commenced to be contaminated. If, at the height of the pain the patient would like to drink a glass of Nocera or Lettuccio water, it will serve him as a relief." *Remarks.*—Tuscan grains have the value of 5 centigrams, consequently are less than the grain employed in Great Britain, Germany, etc. Nocera water is derived from a source in the Central Appennines, and Lettuccio water is the produce of one of the springs at Montecatino, in Tuscany. It has laxative properties, and is less nauseous than many other purgative waters. The *Cantaris Vesicatoria* is found in several parts of Tuscany, its chief source being the Val di Chiani, where the peasants collect it by spreading clothes under the trees morning and evening, and shaking the insect out of the branches. The months of May and June are those in which the gathering takes place, and the fly prefers the olive tree to the poplar and ash, which they also frequent. They are killed by being plunged into weak

vinegar, or by being held over the steam of the same. Afterwards they are dried as rapidly as possible in the sun, and are frequently turned over by a thickly gloved hand, or by other means."

The CHAIRMAN said he had never been bitten by a mad dog, but if he had, he would not like to depend on this remedy. (Laughter.)

A paper on "Solutions," containing some elaborate tables, was read for the author, Mr. T. B. Groves.

NEW METHOD OF PRESERVING MEAT.

Dr. PAUL made a verbal report on a new method of dealing with meat for preservation. They were all aware that in Liebig's system the great mass of the feeding portion of the meat was wasted, and that extract is fitted not for food, but merely to act as a stimulant. The method he was about to explain to them did not destroy the fibrin and albumen. The author of it had, by submitting meat to hydraulic pressure, succeeded in removing from it about one-half of the juice contained in the muscular tissue. This juice contained the constituents of Liebig's ordinary extract of meat, with the addition of all the soluble albumen. Another plan of dealing with the pressed juice was to evaporate it in a vacuum pan, and, by adding a small quantity of gelatine, the liquid would be rendered solid. The principal object of this mode was to express only one-half of the meat, water, and soluble albumen, thus making the residue richer in all food constituents, as well as in stimulating constituents, than Liebig's extract. He expected to have had specimens of three kinds of meat preserved by this process, but they had not yet arrived. These three kinds were—dry beef, prepared beef-juice, and Liebig's ordinary extract.

The CHAIRMAN thought the method explained by Dr. Paul would be a very valuable one. It was generally supposed that Liebig's extract of meat was nutritive, but this he considered a mistake, as it had only stimulating properties somewhat similar to those of theine in tea.

Several speakers confirmed what the chairman had said, and some were inclined to go further than him as to the benefits of Liebig's extract. Mr. Mackay said he had known two cases where an old woman and a young man had been rescued from seeming death by the use of Liebig's extract of meat with alternate doses of champagne. When taken spread on a biscuit or piece of toast, it was known to restore exhausted energies.

Mr. H. C. BAILDON showed a wire case for bottles, which had been used in his factory by aerated water bottlers, and prevented their getting their hands or arms cut when a bottle broke.

The Conference then adjourned its business meeting till Wednesday at ten o'clock.

CONVERSAZIONE.

A conversazione in connexion with the Conference was held in the evening in the Museum of Science and Art, at which about 1,400 ladies and gentlemen were present. The proceedings commenced at 8 o'clock. As each party arrived, they were received by the Local Committee, the following members of which were present:—H. C. Baildon, Chairman; G. Blanshard, Vice-Chairman; W. Ainslie and J. R. Young, Treasurers; J. Mackay, F.C.S., Secretary; W. Aitken, T. Fairgrieve, D. Kemp, J. Mackenzie, S. Macadam, Ph.D., F.R.S.E., A. Napier, W. Tait.

The following office-bearers were also present:—President—W. W. Stoddart, F.C.S., F.G.S., Bristol. Vice-Presidents: H. Deane, F.L.S., Chapham-common, S.W.; D. Hanbury, F.R.S. F.L.S., Clapham-common, London, S.W.; J. Iuce, F.L.S., F.C.S., London; J. Williams, F.C.S., London. Treasurer—George F. Schacht, Clifton, Bristol. General Secretary—Prof. Atfield, Ph.D., F.C.S., 17, Bloomsbury-square, W.C. Assistant Secretary—James Collins, F.R.S.E. Local Secretary—John Mackay, F.C.S. Editor of the Year Book—C. H. Wood, F.C.S. Other members of the Executive Committee—F. B. Bengier, Manchester; H. B. Brady, F.L.S., Newcastle-on-Tyne; M. Cartighe, F.C.S., London; H. Matthews, F.C.S., London.

The Museum presented a very gay appearance. Our readers are aware that it is arranged in an almost identical manner as the South Kensington. The whole building and its contents reflect the highest credit on its promoters. In

addition to the ordinary attractions to visitors to the Museum, the band of the 93rd Sutherland Highlanders was present, and performed selections of band and pipe music; and photographic exhibitions of Scottish scenery and buildings, by the aid of the oxy-hydrogen light, were given in the Lecture Hall, under the direction of Messrs. Nichol and Davies. Light refreshments were provided during the latter half of the evening. A feature of this department was the presence of an American summer beverage-making machine, which was surrounded by a thirsty group as long as it was able to produce a drop of the delectable liquids it is famed for. The assemblage began to dismiss at eleven o'clock, and by half-past eleven nearly all had left.

The Conference met again at 10 o'clock on Wednesday morning. Mr. DANIEL HANBURY read an elaborate paper by his friend Professor Flückiger, M.D., Berne, on the "Crystalline Principles in Aloes." It was illustrated by numerous analyses and tables, and was one of the most valuable contributions to the proceedings of the Conference. An abstract would not convey the author's meaning; the whole is worthy of republication.

Messrs. T. and H. SMITH read notes on aloes. The chief object was to show that aloin as prepared by them was a most effective remedy; constant in its action, and mild in operation. Many medical men and others were quoted in support of this view. They believed that aloin was the cathartic principle of aloes. A long discussion followed, which exhausted the morning sitting.

Dr. TILDEN, to the great regret of all, was not present, and was, therefore, unable to give the result of his past researches. Mr. Deane advocated the desirability of combining aloin with some other purgative. The formula he prefers is

R. Aloin,
Jalapine, aa gr. j.
Ess. Zingib., gtt. j.

By essence of ginger is meant that syrupy fluid extract so frequently employed.

We are still in the dark as to the exact nature of aloin, but a communication on the subject is promised for next year.

ON LINSEED AND LINSEED MEAL.—BY THOMAS GREENISH, F.C.S.

Although the linseed meal poultice is by no means a modern invention, yet the first mention of it (Cata-plasma Lini) occurs in the "Ph. Lond." of 1836, where it is directed to be made with bruised linseed (Sem. Lini Contriti), and the same also in the "Ph. Lond." of 1851; but in the "British Phar." of 1867 the terms used are "Lini Farina," rendered "Linseed Meal," and the explanation which accompanies it is this, "The cake of linseed from which the oil has been pressed reduced to powder." In some establishments, to this day, a crushed linseed is kept for sale to the public. It has, however, been found that this seed is too rich in oil to be kept long in such a condition, as the oil it contains, when so exposed to the atmosphere, rapidly oxidizes, and acquires a degree of rancidity which is very injurious when the poultice made from it is applied to open wounds.

In consequence of this defect it has been the custom of the trade to use a much less oily article, which is simply the meal produced by grinding the dry linseed cake of commerce. The directions respecting this article of the *Materia Medica*, found in the last edition of the "Brit. Phar." of 1867, attempt to solve this difficulty by ordering the powdered linseed cake to be mixed with olive oil, in the proportion of two fluid ounces to the pound, when sent out for use, which is necessarily a very inconvenient practice. In addition to the inconvenience caused by this oxidation of the oil, another has arisen by reason of the impurity or adulteration of the linseed cake from which the Lini Farina is produced; and it is the object of this paper to point out how these difficulties may be avoided and a true Lini Farina be prepared, which, while it keeps well in the pharmacy will also meet the requirements of the Pharmacopoeia, and act efficiently when sold to the public.

It being one of the objects of this Conference to direct attention to adulterations, it becomes the duty of its members to point them out, and if possible to prevent them, this remark applies with force in the present case, as the Lin-

Farina enters into the composition of no less than five preparations of the present Pharmacopœia.

The result of any investigation on this subject must necessarily be imperfect without a reference to the history of the linseed, as imported into this country. Russia is the great linseed-producing country of Europe, and previous to the Crimean war our supplies were almost entirely drawn from St. Petersburg, Archangel, and other ports of the North; also from Odessa, Taganrog, and other ports on the coasts of the Black Sea, in the South. But during the Russian war these ports were blockaded, and the difficulty then experienced in obtaining the required supplies led to considerable importations from India, and such an impetus was thus given to the growth of linseed, that the quantity now imported from the East is larger than that received from Russia, which has never fully recovered her trade.

Even before the war, linseed had always more or less of foreign seeds mixed with it, and was shipped in a very impure condition; but it was during the scarcity caused by the war that it became so very much adulterated, and the principal seat of that adulteration was Odessa.

At that time there existed in this country no institution for checking the growing evil, but this check was ultimately provided by the formation of the "Linseed Association" of London.

(Samples of linseed imported previous to and during the war, to show how loaded it then was with impurities.)

There must necessarily be found mixed with every kind of linseed a certain amount of wild seeds gathered during the operation of harvesting. This would be especially the case with "flax dodder," which is a parasitical plant, but as all or nearly all the accidental seeds are smaller than the linseed, proper screening should remove them.

Careless harvesting and positive adulteration had, however reached such a pitch in 1864, that importers and crushers in that year founded an association called the "Linseed Association," and agreed in future to buy and sell on the association terms, which were that four per cent. only of admixture should be allowed, and that all beyond that proportion should be more or less a loss to the merchant. These terms were soon understood and conformed to by the shippers, and there is consequently, at the present time, no difficulty in procuring linseed almost pure; neither is there any difficulty in procuring linseed with a large admixture of weed seeds, for at the present time Riga and St. Petersburg seed, and probably others, may be purchased without reference to the association terms; and when it is understood that there are sometimes from twelve to fifteen or twenty different foreign seeds mixed with the linseed, and that the whole adulteration may amount to thirty per cent., it will be seen how wide a margin there is left for unscrupulous crushers of linseed. (Samples to show a great improvement in linseed imported after the establishment of the "Linseed Association.")

It will also be observed that there exists much difference in size between the Russian and the Sicilian, or East Indian linseed. The linseed grown in a tropical climate does not produce so fine a quality of oil, but it yields a larger amount of farina, and makes the most nutritious cake; and of the different samples of East Indian linseed before you, that from Bombay has the preference. The small seed grown in a cold climate, however, yields the linseed oil most esteemed by painters and varnish makers for its excellent drying qualities.

It is in the East Indian linseed, the best for its farina, that the wild rape, wild mustard, etc., are found, usually not alone, but mixed with grass seeds; but it is to these pungent seeds of the natural order *Cruciferae* that our objection apply, the volatile oil being developed on the addition of the hot water necessary to form a poultice.

[There are here samples of "flax dodder," found chiefly with seed from the Russian ports, also wild rape, wild mustard from East Indian linseed, and others such as grass seeds.]

It would be well for those who reside in agricultural districts and may be called upon to examine linseed cake, to make themselves especially acquainted with the microscopical characters of linseed, and for that purpose I cannot do better than refer them to some interesting remarks on the subject in the *Pharmaceutical Journal* of February 18th, 1871, page 663, by our President, Mr. Stoddart.

The wild charlock, or corn mustard, is usually met with in English linseed, which is not used by crushers, and I will here just mention a case to show how the agricultural mind is sometimes imposed upon. Charlock seed, of little or no value, is mixed with turnip seed, which it much resembles, and is then sold as genuine turnip seed; but previous to its being mixed, it is subjected to a temperature sufficient to destroy its germinating property. When the mixed seed is sown, the turnip, consequently, only comes up, and the fraud is not discovered, for "dead men tell no tales."

The ordinary linseed meal of commerce, as I have previously stated, is usually made by grinding and sifting a very dry linseed cake; this is generally an imported cake, as English-made cakes always contains water, whilst the foreign cake must have been thoroughly dried to have stood the voyage without becoming mouldy or heated. Fresh English linseed cake ordinarily contains 10 per cent. of water, and such a cake, if ground into meal, would not keep well. The foreign cake is chiefly imported from New York and Marseilles. In the United States linseed is pressed for its oil, as it is here; the consumption of linseed oil in that country being greater than the home supply, it is supplemented by purchases of oil made in England. But the cake is not used for fattening cattle to the same extent as it is here, consequently they are able to send cake to the English market: they are thus buyers of oil and sellers of cake.

This imported and impure cake is the material from which the ordinary linseed meal of the shops is prepared, and though largely and extensively used, does not fulfil the requirements of British pharmacy. Its price, one-half that of the pure farina of crushed linseed, is a sufficient indication of its character and quality; sometimes the farina of crushed linseed is mixed with this cheap meal so as to reduce its price, and the mixture is thus sold with a semblance of purity.

The conclusion at which I have arrived is, that most of the linseed meal of commerce does not come up to the required standard of the Pharmacopœia. On the other hand, a great deal of that which is commercially pure, is not elegant, containing either too much oil or a large quantity of husk, and sometimes both, and that which is the produce of foreign cake can never be relied on, inasmuch as it contains irritating matter which has in many instances on record resulted in considerable mischief.

To produce good Lini Farina, the linseed—preference being given to that from Bombay or Sicily—should after being passed through the rolls, have a portion of its oil expressed without heat, then be ground, and afterwards have the husk sifted out, the resulting farina when mixed with hot water will then assume a gelatinous consistence, and be quite free from any volatile pungency, such as that of mustard, and if kept in a cask lined with tin, will remain good for several months. This in my opinion, is the Lini Farina best adapted for a linseed meal poultice, a therapeutic agent seldom properly made, generally despised, but for which there has not yet been introduced an efficient substitute, and I trust that some crusher who may have his attention drawn to the contents of this paper, will make it his business to prepare a Lini Farina for pharmacists in conformity with these suggestions.

Samples of true Lini Farina, Linseed meal of commerce, pure English-made cake, good American cake, inferior American cake (from which the meal is ground), were exhibited to the meeting.

Mr. C. A. STAPLES described a Tincture Press of his own arrangement, and also "A Method of obtaining Distilled Water economically."

In connection with the latter subject, a question arose as to whether chemists might use a still for the purpose of distilling water without paying the Excise licence. Dr. PAUL stated that he had been in communication with the Board of Revenue, and he had been informed that, although the Board had power to grant exemption from payment of the licence, they found such extreme difficulty in drawing the line between cases liable to duty and cases which should be exempted, that they found it necessary to insist upon payment of licence from every one using a vessel that might be employed to distil alcohol.

At this point, for some mysterious reason, Dr. Edwards was allowed to exhibit some engravings: two of Messrs. Bell's laboratory, past and present; a portrait of William

Allen, and one of Jonathan Pereira. He also described a cheap microscope and slides, both of which were familiar to the most junior member of the Quckett. This episode ran the three remaining papers into the dinner hour; after which time no living man will listen to an archangel.

THE APPRENTICESHIP OF CHEMISTS.

Mr. S. R. ATKINS read a paper on "Pharmaceutical Ethics—Apprenticeship." The subject, he remarked, was one of importance, inasmuch as the future of pharmacy depended on the young men connected with the profession. Apart, however, from the abstract or general merits of the question, there were special and particular aspects at the present moment which demanded consideration. In connection with the question of apprenticeship, it was relevant to inquire whether the system of premium was good. He was disposed to answer in the affirmative; but at the same time he wished to point out what modifications might, in his opinion, be advantageously made. First, as to the facts. Fewer apprentices were being taken, and of these few were trained in competent establishments. The results were evident in the preliminary examinations. The standard of that examination, he thought, it would not be wise to lower, for, to say the least, the adoption of such a course would be an anachronism. The larger houses had not yet felt the scarcity of apprentices, but the inexorable logic of facts must lead to their doing so. The supply of young men was not keeping pace with the demand. Many pharmacutists, and among them there were personal friends of his own, were declining the responsibility of taking apprentices. The result was, that their youths were being relegated to third-rate houses, in which the premium was the consideration in more senses than one, and where a knowledge of chemistry and pharmacy was conspicuous only by its absence. Starting from the position that the ordinance of apprenticeship was sound and good, he came to consider what could be done to improve matters. Firstly, he thought they should insist on the preliminary examination of the Pharmaceutical Society, or its equivalent, one of the University local examinations. The advantages thus secured would be immense, and would have their effect on each subsequent stage. He urged a liberal and prolonged school training, to be continued till at least sixteen years of age. This would necessitate the ranks of Pharmacy being recruited from the substantial sections of the middle class, and this, he considered, would be a gain. Then, as to the terms of apprenticeship, he thought that three or four years should be held as sufficient. The last point he took up was, what were the just claims their apprentices had on them, and to what extent were these being met? To enable apprentices to qualify themselves for the examinations of the Pharmaceutical Society, he suggested that, as local schools were few and far between, whenever there were some half-dozen young men requiring instruction in Pharmacy, they should club together, and during the winter mouths should respectfully request the assistance of the most able pharmacist in their neighbourhood to guide their studies. He further suggested that the Council of the Pharmaceutical Society should foster instruction, and should request competent men to undertake the work, and also that they should suggest class-books, and make arrangements for lending apparatus.

Up rose the patriarch of the Conference, and talked wisely on the subject. It is one of the deepest importance, and a cause of never-ending anxiety. As far as examinations are concerned, our difficulty is the immediate present; our hope, the future of five years hence.

Mr. MACKAY (Edinburgh) said that throughout the whole of Scotland he was not aware there was one case in which premiums were paid and apprentices boarded with the employers; and he thought that his English friends would be acting rightly if they took a leaf out of the same book. Further, among the members of the Pharmaceutical Society it was understood that no youth should be received unless his parents or guardians agreed to pay certain fees for certain classes, the master being bound to allow him time to attend these classes.

Votes of thanks were given to the gentlemen who had read papers, and the eighth annual meeting of the Conference was ended.

We of the South left the grand city and its inhabitants with unfeigned regret. We confess to a certain feeling of humilization when we call to mind some of the excellent pharmaceutical establishments over which we were conducted. One pharmacist to whom we should have thought the bar would have held out stronger temptation than drugs and chemicals, has introduced the latest pharmaceutical appliances in this Northern capital. Another, we are bold to say, possesses the noblest dispensing establishment we have yet seen, and we are not unacquainted with celebrated houses on the Continent. A third can see from his front window the old castle towering on one side, and Arthur's Seat on the other. Such a man ought not to succeed, for he is enjoying too many of the good things of this life at once; yet we know he does, and that at home he can show not only fossil trees, but gracious hospitality. Is it all rose-colour, and is there nothing wrong? Yes; there is a padlock on the doors of the twin libraries of Edinburgh and London. The advantages they offer are reserved to the members of the Pharmaceutical Society. Would you be surprised to hear that this is the way to create and perpetuate outsiders? Would you further be surprised to find that it is a solecism in the conduct of a supposed learned society, and that some members, themselves not unconnected with officialism, learned the fact with blank astonishment. Let us then enter upon the new session with more liberal and better views, and with more common sense; let us upset this element of weakness—this great wrong; and though it may be in accordance with a bye-law written by the Medes and Persians, we suggest to the careful student of history that that dynasty is numbered with the past.

THE PHARMACY BILL.

AS many will have learned ere this, the Pharmacy Bill was withdrawn on the 17th ult., Mr. Gladstone remarking that it required a good deal of discussion. We are pleased to have been of service to the trade in this matter, and now that the bill is at least postponed, recommend that the leaders of opinion on both sides see if they cannot arrange some basis of action that shall cause the Privy Council to relieve Mr. Simon of further trouble *re* Pharmacy, as we are convinced he can devote his abilities to better purpose. We would suggest to Mr. Simon, in case he recommends trying next session to bring in a fresh measure, that he give the trade fair notice, and not attempt to slip the matter through Parliament without allowing those who should understand their business to have a voice in the matter. The bulk of the trade are much indebted to the few leading minds who have spared neither trouble or expense on this crude measure.

We give extracts of public opinion on this bill, that chemists and druggists may see themselves as others see them:—

The *Lancet*, writing before the withdrawal, said: "There can be little doubt that, late as the period of the session is, the Government will do their best to make its provisions law before the House of Commons separates for the holidays. The pharmacutists declare their intention of fighting the question out.

"We hope that Mr. Forster will not be induced by any circumstance to alter his present determination. The bill is a most moderate one. Its provisions are calculated to inflict not the slightest hardship, not even necessarily any inconvenience, upon pharmaceutics, whilst they will only just secure for the public that amount of protection against accident in the matter of the handling of poisons which they have a right to expect, but which does not exist. We are by no means sure that the Privy Council ought not to propose the appointment of inspectors in addition."

The *Pharmaceutical Journal* of July 22nd, wrote:—

"Although the withdrawal of this bill was received with general approval in the House of Commons on Monday evening, we cannot avoid expressing regret that it was not then dealt with more definitely than by withdrawal.

"We regard it as a misfortune that this question should still be left unsettled, for the letters and other documents we publish to-day in reference to the subject of poison regulations

sufficiently slow that the result will be a continuance of conflict. Those who are more or less favourable to compulsory regulations are evidently aggregating together, and making use of the example set by the opponents of the bill. If they continue to do so with anything like the energy and activity manifested by those who have opposed the bill, there is every reason to anticipate that the contest is by no means at an end. We cannot hope to take leave of this bill by endorsing on its history *requiescat in pace*, and must be content to regard the next few months rather as an armistice, during which it will be the duty of every one connected with British Pharmacy, whether directly or indirectly, to consider well and seriously how much he may be disposed to yield of that which, in the heat of controversy, may have seemed to him indispensable.

"Above all things we would urge upon those who may not hitherto have adopted the precautions recommended by this Society in regard to the storing of poisons, that they should at once remove all ground for complaint on this score, and that according to their particular circumstances, they should give the fullest possible effect to the recommendations issued by the Council."

The *Medical Press and Circular* under the heading of Protection from Poisoning in England says:—

"The Pharmacy Bill, after having passed the House of Lords, and achieved its first reading in the Commons, etc., has submitted to inexorable demands, and been withdrawn. We deeply regret this result, for we fear the protection of the public from misadventure may be seriously endangered thereby. Before the next meeting of Parliament, the Government which has pledged itself to effect this necessary and just reform, may have died, and its successor may want the votes of the druggists. Whoever may be selected to succeed him at the the Privy Council may possibly not care whether or not her Majesty's lieges are poisoned occasionally. Moreover, the druggists will have time to organize a barricade, and we know by the anti-vaccination and contagious diseases agitations, that there is no opposition too ridiculous to effect its object, if it be only pushed, without scruple, through the medium of indignation meetings and newspaper paragraphs."

The *Lancet* of July 22, writes:—

"We regret that the Government have been compelled to withdraw the Pharmacy Bill; let us hope with a view of bringing in a more satisfactory and complete measure."

And the *Ashton Reporter* writes as follows in its July 22nd issue:—

"The abandoned Pharmacy Bill was on its first introduction a surprise. Originating with the Medical Officer of the Privy Council, who surely has not sufficient suitable employment, it was hurried through successive sittings, in the Lords, without comment or debate. Its leading purpose was to enforce upon all dispensing chemists certain uniform regulations for the storing of poisons, which regulations, when submitted to the judgment of the chemists of the kingdom, were pronounced inimical to the public safety by four-fifths of the entire trade.

"The best method of storing and dealing with poisons—or, as it may be expressed, the best shopkeeping arrangements—are not very likely to occur to the hon. members of her Majesty's Privy Council. Even the Medical Department of that body has no practical acquaintance with the subject. Quite as suitable would it seem for the chemists of the kingdom to issue regulations for the surgeons or dentists in their difficult operations, or to venture upon a bolder stroke and give advice to her Majesty's Privy Councillors upon the dispatch of public business. A few days' canvass satisfied the resisting body that the Pharmacy Act never could pass the Commons.

"The opposition was becoming formidable, and the situation somewhat ridiculous. Here was the Privy Council trying to arrange the shelves of a druggist's shop. *Punch* might be on the look out for a cartoon. Yielding to the great pressure from without, or perhaps awaking to the consciousness that the trained and experienced servants of the public are best qualified to discharge responsible duties, an amended bill was substituted for the original. This amended bill, born in an emergency, survived only a few hours, and is already in an advanced state of decomposition. The public did not ask for it, and does not need it. The trade is able to take care of its poisons, and of itself. A Pharmacy Bill that should substitute routine for alert attention would be fraught with

inevitable mischief. We do not pretend to say that the hands which are trusted to mix our physic and vend our poisons are always wisely guided; but upon the whole, we would rather commit ourselves in such matters to the care of a very ordinary chemist, than incur the risk of being experimented upon by an extraordinary Privy Councillor; and hence we congratulate our readers upon their deliverance from the amended Pharmacy Bill.

NOTES "EN VACANCE."

VERSAILLES, June 15, 1871.

IT certainly is a mistake, thought I, as I strolled down the main street, to stop at the place *en route* for Paris.* Here I shall have much difficulty in getting a room, and so it proved. The insurrection was just overcome; MacMahon had by a grand *coup* taken Paris. Thiers' favourite fortifications had proved stronger against himself and his party than against the Prussians. The troops were continuing to pour into the great city, but still Versailles was very full—full to overflowing with officers, *avocats* attached to the various ministers, aides-de-camp and orderlies galloping about in all directions—a general appearance of a great deal of bustle and very little real work. And yet this is scarcely just. The President of the Council is not the man to shirk work, and he makes those under him work likewise; but of course we could scarcely judge of this by the appearance of the streets. If, in the general run of things, there is a duller place than Versailles, I should very much like to learn its name; but, in my mind, henceforth dulness and this town must no longer be synonymous terms. And not only is it not dull, but it is now peculiarly and systematically dirty—dirty with the filth of camps and of soldiers, and of their many-jointed followings and belongings. In most of the avenues, and in all the open spaces in and around the town, have been for several weeks the bivouacs of many soldiers, and dirt and filth of every description lay all around in unstudied, but not even picturesque confusion. Up many streets I wandered, down one *place* and up another boulevard—none of those white or yellow placards to be seen indicating apartments, furnished or not, to be let. At length I was more successful. I passed several pharmacies; but really, after careful examination, there seems to me to be very little new to be said of provincial pharmacy in this country. We must now soon consider Paris, and then wander to other countries. Pharmacy may be carried to greater scientific lengths abroad, and the idea that they order things better in France may still prevail in England at the present time as much as in the days of Sterne; but all my travels and all my experience have not tended to make me less patriotic, or less apt to admire the excellencies of English pharmacists, and to explain away what are considered as their shortcomings. And let me remark that I do not here allude to those *in statu pupillari*; these worthy and studious young men can never receive any harm from noticing the advantages given to foreign pharmacists by the severe course of general study necessary for the French diploma of *première classe*—by the regular and systematic work which is required in order to pass the necessary and severe examinations in every part of the continent of Europe, though these are, perhaps, nowhere so much of a test as in Germany. Not one word have I to say against these strict examinations, or against the hard and constant application of the mind that they necessitate; I simply speak of their product, the full-blown pharmacien, and I maintain, with a certain feeling of pride I admit, what my experience every day proves more and more, that the English pharmacologist is superior to his foreign *confrère* in business habits, is equal to him in knowledge of the world and general ability, and is rapidly (by the present system of examinations in England) reaching up to the Continental government standard. And this scientific standard once reached, I think the Englishman is inferior only to the American in the applicability of this acquired knowledge. We have men enrolled among the number of our *confrères* who would hold a foremost place among the pharmaciens of any country. The Ecole de Pharmacie of Paris has never had pro-

* There I should, as a visitor coming to spend money, have been received with open arms.

fessors taking a higher rank than have done Fownes, Pereira, Bentley. Hanbury, Brady, Attfield, Morson, Evans, Howard, are names which may well make us proud of the annals of British science, and this position has been accomplished here by sheer hard work, and mainly by individual effort; we have been without the powerful aid and careful training of a paternal government, and without that wonderful system of almost perfect centralisation and hot-house care and tuition. Certainly our English intellect is a hardy plant, that flourishes amid the greatest difficulties and in spite of the most adverse impediments, and the result is one at which we may surely rejoice. As long as this spirit of battling against what is in our way prevails with us, so long will national honour and commercial probity be causes, with the greater number, for self-congratulation. Here, as in all other places, I noticed the small number of preparations in the pharmacie, and the large number of simple drugs, especially herbs, flowers, and leaves, and all in bottles, some narrow, some very wide-mouthed. In the gums and gum-resins, fine specimens are not often to be seen. The myrrh is generally what is known in England as East Indian; very rarely is that called Turkey to be seen; scammony is frequently heavy, and of a dull, hard fracture—plainly, what we call Aleppo; but in France these two descriptive names (for they are nothing more) are reversed, for *Scammonée d'Alep* is the best and purest, and *Scammonée de Smyrne* applies to the inferior qualities, and to those containing mixtures of chalk and starch. It is, doubtless, owing to this uncertainty as to the percentage of active principle in this drug, that latterly the "Resin of Scammony" has been so much employed here, and it is met with in a beautiful form, perfectly white. I had never seen any with us approaching it in absence of colour. A remedy, very popular in France a little time ago, the *purgative Leroy*, contains scammony, jalap, and turbith root in large quantities, exhibited with alcohol and syrup of senna. As has been the case with certain popular, though powerful remedies with us, several lives have at various times been lost by an incautious and too abundant use of such medicines. The proverb applicable to the lawyer might be changed to "the man who is his own doctor having a fool for his patient."

Perhaps in actual practice, the French medical men confine themselves to as small a number of general remedies as with us—certain it is that there are to be seen in the pharmacies many drugs that would be considered as old-fashioned and antiquated with us. The bark of *Strychnos nux vomica* still goes by the name of *Augustine fausse*, as distinguished from *Augustine vraie*, or *cusparia*. Bdellium gum is a recognised article of the *Materia Medica*, and is sold and used as such. It is the light-coloured Persian variety, not the dark East Indian which we find intermingled with myrrh; the nodules are not so hard or brittle, though equally tough, with sharp, translucent fracture; in colour, a light greenish drab, seldom or never assuming the dark red colour that we are accustomed to see in this unwelcome adulterant of our myrrh. Guaiacum is very seldom met with in lump, too often mixed with much drossy matter. The oleo-gum resins of the *Umbelliferae* in particular, are scarcely ever seen in "gutta;" for this reason the *Codex* orders them to be purified before use. This, as was mentioned in a monograph on these products by M. Déuian, of Paris, would be unnecessary was the pure form or drop more frequently used by pharmaciens. Fine cinnamon bark is rarely met with, cassia being generally substituted. Our red sarsaparilla (called Jamaica, *lucus a non lucendo*) I have never seen in France; they make use invariably of a very cheap Mexican or Vera Cruz variety, that comes principally into Marseilles in long irregular bundles, with large root-chumps or *souches*. Marseilles is the principal French port for drugs of the heavier kinds, as gums, roots, oils, etc. Havre receives much South American produce, as copaiba, balsams of Tolu and Peru, Peruvian barks of all description. Dunkerque has the *spécialité* of cod-liver oil; Bordeaux and Nantes occasionally have at their quays vessels with consignments of *articles de droguerie* from the continent of America. At present London has the monopoly of East Indian produce. It was thought that the opening of the Suez Canal would force much of this trade into Marseilles, but British energy has taken such advantage of this

triumph of engineering as more than ever to keep this trade to itself. The Dutch, however, continue to hold in their hands a fair proportion of East Indian import business, and their periodical sales of the produce of their colonies in those seas are very important. Hamburg also keeps to itself a large amount of the export trade in drugs and spices from the East. This great port supplies the northern countries of Europe, and has an enormous trade with America, both North and South. I was considering the other day what was the most important drug sold to the chemists and druggists of France, and I came to the conclusion that undoubtedly there is more Peruvian bark or *Quinquina* bought by them than any other article of equal importance. Although here, as with us, it is classed as pale or grey, yellow, and red descriptions, yet it is never known by the barbarous and now unscientific names of *cinchona lancifolia*, *c. cordifolia*, *c. oblongifolia*. To English ears the names of *Quinquina Loxa*, *Q. Huanuco*, *Q. Guaquil*, would generally fail to convey an accurate idea of what is meant. *Q. Calisaya* however, has been with us of late coming in partial use. And yet, the qualities in the two countries are the same, a large portion of the French supplies being bought at public sale in London and Liverpool; in general terms, we may say that what is known with us as fine "brown" bark, becomes over the water *Q. Loxa* and *Q. Huanuco*; "grey" bark is, *Q. Guaquil*; and the fine "royal" yellow is *Q. Calisaya* or *Kalisaya*. With regard to red bark, of which there is here always a demand for fine, long, and heavy pieces, the French show their correctness by simply denominating it *Q. Rouge*, leaving out of sight the *questio vexata* of its botanical origin. Inferior qualities of pale and yellow barks meet with a ready sale in some districts, but they are clearly sold by the wholesale houses as inferior in quality and low in price. One seldom meets with cases of their wilful substitution for barks of better quality and richer yield of alkaloids. I have noticed a flat pale bark, called in the trade *Lima*, that breaks up very well as *Quinquina concassé* (or bruised); this is everywhere extensively sold to the public by the ounce, with the view of enabling them to concoct at home that great domestic medicine, the *Vin de Quinquina*. In second and third qualities of yellow barks, I have met with both hard and soft *Carthageana* barks, *Pitayo* (small, broken, in thin pieces, curling up at the sides), and *Cusco* bark; this latter often assumes a wonderful likeness to genuine *Calisaya*. In fact, the almost total absence of quinine is its principal distinguishing mark, for in many pieces I have remarked the same closeness of texture and "short" fracture, the same size and thickness, and often a very similar epidermis, and an absence of that splintery fibrous texture that marks the *Carthageana*; the colour, however, more nearly approaches the orange varieties of *Arica Cinchonas*. Here, let me remark, it is a universal matter of regret that in all yellow bark the serons every year contain a smaller number of fine large pieces, and a greater proportion of small and broken; for preparations it is not of much consequence, but the retail trade much prefer the large; they are then better able to judge of its quality and nature, and also of its expected properties and yield. Assistants, during the last few months, are still very scarce: in one of the *pharmacies* here, in which I spent some very pleasant hours. I met with an elderly man, who seemed more like the *patron* than a simple *élève*. In course of conversation, he offered one morning to take me to see over the ruins of St. Cloud, and then it came out that he had been a *pharmacien* in this latter town, and was now for a short time assisting a *confrère* of Versailles for his support. Poor man! his *pharmacie* at St. Cloud was now a mass of ruins—in fact, the street in which it once stood presented the appearance of having just received the visit of an earthquake. The road lay between two lines of wretched shells of houses, and was so encumbered with heaps of masonry, *débris*, etc., that it was a matter of great difficulty and no little danger to pick one's way along with safety. He pointed out to me where had once stood his house, but I was utterly unable to perceive here any trace of a *pharmacie*. The poor man with tears in his eyes spoke of the pride that he had had in his old-fashioned shop. He had, a short time before, invested the earnings of some fifteen years' incessant labour in the acquisition of this house with a little country villa outside the town and a garden—the dream of every

French *bourgeoise*; the former had been turned into a stable for Prussian cavalry, of the latter he said that not a trace now remained to show where his spring salads had grown, or where his favourite flowers had been reared with such care and attention. But the hardest blow seems to have been struck by his compatriots. When Trochu ordered the Chateau of St. Cloud to be shelled, the Prussians occupied the town, and then began that bombardment of the place by the French themselves, that has reduced this once beautiful little spot to its present pitiable condition. This is the saddest sight in the neighbourhood of Paris. In this I fully agreed with my poor friend, the ruined *pharmacien*.

F. H. L.

BOTANICAL GARDENS.

THERE is really no excuse for any pharmaceutical student to cut a bad figure in the botanical department of his examination, if he can by any means gain occasional access to one of the many beautiful botanical gardens which are to be met with in certain of our large towns. It is a question that we would leave casuists to determine, whether obtaining botanical knowledge by such means savours in any degree of the dreaded system of "cramming." Such a question would hardly have much interest for the anxious student who, having arrived at a fairly accurate idea of the distinctions between paren-prosen and bothrenchyma, the last of which, in defiance of orthographical considerations, is generally regarded as the most appropriately named of all the tissues, clearly perceives that all his labour will be thrown away if he fails to recognise promptly *Atropa Belladonna* or *Conium Maculatum*, and particularly if, with a head which can retain a good deal, but with a mind which has never been bent either in a bucolic or domestic direction, he should unfortunately confuse *Solanum Dulcamara* with *Solanum Tuberosum*.

The opportunity of learning to recognise plants in a botanical garden, where the most important have been brought together and classified, is so great, that a resident in a large town, when access to such a garden is to be obtained, has a decided advantage in this respect over the rural denizen, though the examiner, who is an austere man, will not for a moment admit the conclusion, but will taunt the humbled candidate with a recital of the advantage which he has miserably wasted and foolishly thrown away while in his pleasant country home.

Notwithstanding its manifold drawbacks in the way of climate and luxuriance of soil, England is undoubtedly, pre-eminently the land of gardens. It has not been so always. And it is a fact which we think will hardly be disputed, that at this moment, and perhaps to some degree as a consequence of the horticultural cultivation which, as we have said, has so greatly advanced in this country, that England stands foremost for the number and skill of her botanical scholars.

The first botanical garden of which we have any account was founded at Salerno, in 1310. A public medical garden was founded at Venice in 1333, and many others followed in various parts of Italy; one at Milan, especially large and beautiful, having the highest reputation. In Germany some very fine gardens were established, chiefly in the 16th century. The gardens of Nuremburg have been the highest esteemed. Botanical gardens are connected with most of the universities in Germany, and their importance to medical students is fully recognised.

Bohemia has many fine botanical gardens. In Hungary, the oldest described garden (1664) no longer exists; that at the university of Pesth was modelled in 1783; and that of Prince Esterhazy, at Kis-Martong, with 70,000 species of plants, is one of the richest known. Poland has several, founded in 1651. In Russia there are several; one founded by Alexander I., on Apothecaries' Island in the Neva, with very large glass houses, about 7,000 feet long, and some of them forty feet high in the centre. Those of the Historical Society at Brussels and Ghent are the most remarkable in Belgium. Dutch gardens, though rich and well administered, are mostly stiff in their plans. In France, gardening has never been flourishing. The first botanical garden was founded in 1590, by P. Richard de Belleval, at Montpellier; and in 1626, a royal Jardin des Plantes was laid out in Paris

and completed in 1633, by Guy de la Brosse. It soon afterwards went to decay, but was revived by Colbert, and at one time surpassed, in many particulars, some in England, Germany and Russia. Of twenty-five French public gardens, of which ten are known in literature, we note that of J. and V. Robin, at Paris, where plants were cultivated to serve as patterns to Court embroideries, as early as 1590. Spain and Portugal, notwithstanding their maritime commerce and riches, have done little for botanical science. Garcias at Horto, however, founded an official garden on Bombay Island about 1563. There are but two public gardens in Spain, one at Madrid and one at Barcelona; and in Portugal, one at Coembra, worthy of note. Switzerland has five botanical gardens; Denmark, four; Sweden, the home of Linnæus, five. There are also botanical gardens at Batavia, Bombay, and Calcutta.

In the United States there are several botanical gardens: one in New York City; one at Elgin, New York, founded by Dr. Hosack in 1801; another at Lexington, Kentucky, catalogued by Rafinesque, 1824. Some attempts have also been made at Cambridge, Massachusetts, Philadelphia, and elsewhere, to found botanical gardens; and we have lately read of the opening of some spacious grounds at St. Louis.

In England, it is hardly to be questioned that the public gardens at Kew rank above all the other horticultural displays in the country. There are said to be more than 40,000 phanerogamous plants cultivated there. The gardens of the London Horticultural Society, which flourish under "the cold shade of the aristocracy" in Kensington, are especially noted for their handsome varieties of trees and shrubs. This Society has instituted examinations for gardeners. The Royal Botanical Society leases the whole of the inner circle of Regent's-park, a space extending to nearly twenty acres, and holds brilliant flower shows and promenades on its charming slopes. Napoleon's willow, brought from St. Helena, is planted there, and is one of the most graceful trees in the world. Near the north end of the gardens a space is devoted to an arrangement of British plants on both the artificial and natural systems, and courses of lectures on botany are delivered here. A neat little garden is fixed down at Chelsea, and has been there since 1673, when it was founded by Sir Hans Sloane. It now belongs to the Company of Apothecaries, and is used as a training ground for their students. It is shut out from the world by a high wall, and comprises only four acres, but it contains a very excellent and well-arranged collection of British plants after the natural system.

Among the most noted botanical gardens in other parts of the kingdom, the two at Dublin are perhaps the finest. One of these at Glasnevin is of great beauty, and occupies an area of thirty acres. The garden at Oxford, founded in 1640, holds a high position, and those at Edinburgh, Liverpool, and Manchester, add most valuable attractions to the cities in which they have been placed.

We not unfrequently hear objections urged to botany as a branch of pharmaceutical education. Such an objection is manifestly absurd, but it is held; and though the reply is so very obvious, it may be well to give it. If botany had no other earthly use, it would be an essential part of the study of the accomplished pharmaceutical chemist. It is no modern innovation. Botany and medicine have gone hand in hand from their very birth to this day. The Greeks attributed the invention of both sciences to one individual, Chiron, the wisest of the Centaurs. Hippocrates, Aristotle, Theophrastus, Pliny (the elder), and many other of the most distinguished scholars in medical science, both in ancient and modern times, have also advanced the world's acquaintance with botany. At present not less than 120,000 species of plants have been described. By what means could this vast number be kept in order for reference, if systematic botany had been unknown? And in how many particulars are pharmacy and physiological and structural botany mutually dependent?

The invention of the microscope has done more than anything to aid in the elucidation of the mysteries of vegetable growth and reproduction. The advance of the sister science of medicine has not perhaps been so satisfactory. But unless pharmacutists keep well abreast with every new step in botanical exploration, there is but little hope that the rich stores of Nature will be properly laid under contribution towards the alleviation of human suffering.

"THE SCHOOLMASTER ABROAD."

FROM time to time notice is drawn to the imaginary peregrinations of the village pedagogue by very original specimens of scholarship. A correspondent in the country has favoured us with a choice collection of these, which we publish below. The easiest names in pharmacy appear to be "stumbling-blocks" to the rustic mind.

3 Mixt Saint for Hair Oil.

one Packett of Henden Gritts.

6 pennyworth of Daffies Corgcal.

One oz of Palms City Powder painde fine.

2 ld clored Lime 2 bottles balsom oney seed To sell again.

Sir ples to send a shillings worth of Calome and ruburb pills do them up safe

3 penath pill cochea.

3 penath white mackrey.

2 penath betor bapel.

1d. poopey head 1 Assesen peperment.

6 Peny worth of Carvonite of Soda.

Clort lime.

Darck tinctor of mur.

Ounces Annes seeds fries Balsam.

que nine mixture.

i writ this fu lins to you to ask you if you wold Be so kind as to sen a littel medson for an hold pursan for the

Bolcomplant.

please to bring me a packet of vilet poder from the cimest. Fosfros Paste.

1 Peny woth fuers herth.

Allebore Powder and Read sippet Powder pleas to send it By the Postman.

2 lb Black Sulphore half A lb of Elibour.

Spirits of Time.

sir ples to send one sbeling worth of Calome pills and a box of Cooling ointment for Scurfey breaking out in the head verey humery and hich verey much and some about the bodey ples to send a peneth of red Insipet powder that I may put a small bit on the ointment when I use it I have a few crepers in my hed and want to kill them send a peney worth or two of uncton as I wish to try the anointing of the Joints with a little of it but not when I am taking the pills put the name on the ointment to have no mistake keepe the uncton safe from the pills do it up safe.

Bore ax for thea soor Mouth.

Alf once canfor.

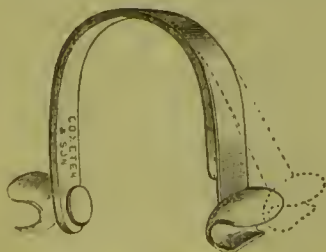
compound Rue BuB pills.

Please to send 2 Peneyworth Anty Bilios Pills.

Sir I sent one and six penee for pills scald up and I paid the Carroge and you only sent five and twenty pills you Must send the others by carrear on Saturday and pay him for his trubel I cannot pay twice it enough for Me to pay once and have dubel trouble.

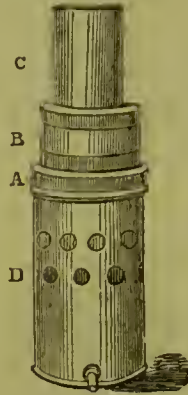
Dentistry.

THE rubber dam seems to be gaining favour, and is highly reported on by many leading practitioners. Nitrous oxide, though now so popular, occasionally gives rise to difficulties; two cases are reported in the *Journal of Dental Science*, where imperfect administration in one case led to the patient becoming thoroughly pugilistic, and in



the other the operator was shot at with a revolver, which missed its mark fortunately. Messrs. Coxeter and Sons, under the guidance of Mr. Hutchinson, are offering to the profession an improved gag for use with nitrous oxide, which we have pleasure in illustrating.

American dentists speak highly of the Perkins-Hyatt (Celluloid) Base, which is being brought forward as a substitute for vulcanite, by the Dental Plate Company, of Albany, U.S. The *Cosmos*, says it is lighter, stronger, better colour, without taste, and more durable.



Mr. Fletcher has introduced a gas furnace for dentists, which we illustrate, as arranged for crucibles. Its claimed specialities are the burner with solid flame to the centre, no draught or bellows required, portability, crucible always visible, non-liability to injury, economy of fuel, cleanliness, etc., etc. The maker states that for dentists' use, it will melt the zinc, lead, and tin for three dies and two counter dies in less than half an hour; and in case of a misfit, a die may be made from a new model in five minutes at any time.

The annual general meeting of the National Dental Hospital was held on the 29th. Like most institutions dependent on voluntary contributions they suffer from impecuniosity; 4,000 patients average to be relieved, and the committee complain that many recipients of gratuitous relief are well able to pay, and in fact to be donors; during last June the staff extracted 909 teeth, and administered nitrous oxide 190 times. Of nitrous oxide the committee speak in the highest terms, but find it costly. The "Dental Profession" is the title of a pamphlet issued by Mr. Hardwicke, and written by a dental surgeon, with the hope of exposing dental quacks; the task is herculean in the present state of the law. As an idea of how much in advance of us are the Americans, the South Carolina Dental Association has recently entered its second year of existence. Guillois cement is finding favour in the Western hemisphere; an article in June *Cosmos* speaks highly of experimental trials. White, of Philadelphia, we note, asks \$5 a box for it. In an article on dentistry in the July number of the *American Journal of Dental Science*, Professor P. H. Austin remarks:—"The problem of professional education is one of difficult solution. While European systems seek to make 'experts' of students, American systems are content to make them 'experimenters.' The Old World regards three or four years of extra study a small matter, compared with the lives and welfare of the community: the New World considers any risk preferable to such delay in entering upon the practical duties of life." In the same journal Mr. S. G. Perry, of New York, ably discourses on "Methods of Consolidating Gold Fillings."

Homœopathy.

THE *Homœopathic World* continues its articles on the "Green of the Period, and its Allies," and its readers, we presume, will be cautious in occupying rooms with arsenical linings.

Cape Town is becoming a centre for South African homœopathy; it possesses a flourishing dispensary in Church-street, and its leading physician is Dr. C. W. Kitching, a London University graduate. Advice and medicine are given to all suitably recommended. The last Cape mail brings the sad news of the death of Dr. Johannes Smuts, M.D., at the Paarl. He had practised in the Paarl for some twenty-six years, but only homœopathically for the last twelve.

In the *Monthly Homœopathic Review* is a long and able article on "The Dose of Homœopathically-acting Medicine."

The province of Ontario, Canada, has a Medical Council made up proportionately from the various schools, allopathic, homœopathic, and eclectic. It appears to have worked fairly, and great good must arise from association.

Oxford, on Wednesday, September 27th, receives the British Congress of Homœopathic Practitioners. The *Review* states—"The President, Dr. Madden, will deliver an address 'On Therapeutics in its Relation to Modern

Physiology.' Papers have also been promised by Dr. Black, of the British Homœopathic Society, 'On Posology;' by Dr. Dunn, of the Northern Homœopathic Medical Association, 'On Thirty Years' Experience of Homœopathy applied to Surgery and Obstetrics;' by Dr. Wynne Thomas, of the Midland Homœopathic Medical Society, 'Reports of Surgical Cases;' and by Dr. Moore, of the Liverpool Homœopathic Medico-Chirurgical Society, 'On Uterine and Ovarian Disease.'

"Membership of Congress will be restricted to duly qualified members of the medical profession practising homœopathy in Great Britain and Ireland. The President will take the chair at ten o'clock in the morning. There will be an adjournment at one o'clock for an hour. The members will, with any friends they may choose to invite, dine together in the evening. Dinner will be served at six o'clock.

"No paper will, with the exception of the President's 'Address,' occupy more than twenty minutes in reading. The observations of members in the discussions following the papers will, it is expected, be limited to ten minutes each."

Homœopathy in America has been holding its twenty-eighth anniversary in Philadelphia, and judging by the *Hahnemannian Monthly*, a pleasant and profitable four days were spent. The homœopathic pharmacists also held a meeting on the fourth day, and transacted what little was required to be done. The annual meeting for 1872 is to be held at Washington, and commences May 22nd, under the presidency of T. S. Verdi, M.D.

The 1871 meeting is the largest ever held.

Mr. T. L. Brown, of Binghampton, New York, offers the liberal sum of 100 dols. per annum for ten years in aid of the college of Provers.

Medical Gleanings.

OUR next issue will bring us on to the borders of the medical new year, which, our readers are aware, commences in London with each October. The students and medical officers of the new St. Thomas's Hospital may congratulate themselves on their pleasant resting-place, provided, we were recently told by a very competent authority, at a cost of nearly £1,000 per bed. In our humble opinion, a larger number of beds in a less palatial structure would have best fulfilled the accepted wisdom of a government, whether imperial or otherwise, providing the greatest good for the greatest number.

Recently the Town Council of Longton had the good sense, not usually credited to town councillors, to confer with the medical practitioners of the town as to the best mode of suppressing the small-pox. It was decided to make a house-to-house visitation, with the view of persuading people to be vaccinated or revaccinated.

The five volumes of the second edition of "A System of Surgery, Theoretical and Practical," in Treatises by various authors, edited by T. Holmes, M.A. Cantab., are now issued by Longmans, and are very highly commended by competent critics. Of course, with so many writers varied talents must be expected, and even occasional mediocrity, but as a whole this great work is, perhaps, the best extant, and does Mr. Holmes great credit.

The Medical Registrar has been instructed to erase the name of Frederick Henry Morris, of Swindon, from the Register, Morris having been convicted of misdemeanour.

At the recent meeting of the Medical Council the Pharmacopœia Committee came in for criticism, and apparently they deserved it, not having met once during the whole year.

The *Lancet* points out the therapeutical value of asphalt pavement in the neighbourhood of hospitals, etc., and the invalid public are their consequential debtors.

It appears that the reported movement of the Medical Club to Pall-mall will not take place, but the present premises are to be extended and improved.

The dinner given to M.M. Ricord and Demarquay by the profession, at Willis's Rooms, on the 17th ult., was a success,

and cannot fail to extend cordiality between British and French. M. Ricord responded in English, and was loudly applauded.

Re-vaccination by secondary lymph has been discussed during the month, but no actual decision of comparative value has been pronounced.

The Islington Guardians, through their chairman, disapprove of tinctures being ordered by their doctors and supplied to their dispensaries, on the ground that they lead to habits of intemperance.

In consequence of the complaints of the use of china clay, etc., in textile fabrics, it is stated that the Privy Council have directed one of their medical inspectors to inquire into and report on the matter.

It has gone the round of the medical press that the instantaneous application of carbolic acid and spirits of wine, in the proportions of two of the former to one of the latter, is a cure for the bite of venomous snakes.

The *British Medical Journal* has recently published the Prize Essay, 1870, on "Digitalis: its Mode of Action and its Use," by Dr. J. M. Fothergill, Hastings.

Professor Halford, of Melbourne, has been presented with a testimonial, consisting of a handsomely bound book and a purse of 120 sovereigns, as a recognition of the merits of his method of treating cases of snake-bite by the injection of ammonia. In making his acknowledgment, Professor Halford gave an interesting explanation of the circumstances which had led to his discovery, and expressed his belief that his mode of treatment was capable of extension to constitutional diseases.

For some time past the various examining bodies, as College of Physicians, Surgeons, etc., have been trying to initiate a scheme for one central examining body. Recently, the medical press have given considerable publicity to the matter, but without much greater unanimity it will be time wasted—filthy lucre stops the way. The smaller bodies appeal to vested interests with the usual tenacity.

Fees to medical witnesses have had recently some attention given to them. Hitherto the law courts have been very illiberal, and we think a good case could be made in favour of increase if the right men would take up the matter.

In Australia the Victorian Government will shortly have an amended Medical Bill brought before it, which, if passed, will interfere with a large number of "bogus" doctors. From the same part we learn that an American homœopathic M.D. is said to possess about the most lucrative practice in Melbourne, and that homœopathy possesses many powerful advocates.

Mr. Hinton, in his work recently published by Messrs. Smith, Elder, and Co., speaking of nursing, says that it should be a profession as equally honoured and remunerated as medicine, and that if the public would so recognise it, ladies would be found to go through suitable courses of education, etc., and confer great benefits on mankind. We should like to hear Mr. Hinton's opinion of the medical students of Edinburgh.

We are pleased to see the interest shown by our imperial visitors, both Brazilian and German, in our public hospitals. Their action tends to increase the professional pride of both officers and students.

Haviland's "Geography of Disease," noticed recently in our columns, has been complimented by the Emperor Napoleon in a special letter, his Majesty at the same time subscribing to the work.

In the *Medical Press and Circular* of the 2nd inst. is an illustration of a vaccination sleeve or protector that is both simple and effective, and is formed of perforated zinc, bordered, and with suitable fastenings. Of course it can be made any size.

SOME experiments have been made in the Thames with Holmes's Self-lighting Inextinguishable Signal-Lamp, with apparently much success. The lamp is a cylinder of tin, with a conical top; this is filled with a phosphide of calcium, prepared by the inventor. When the lamp is thrown into the water, that fluid, entering the cylinder, effects the decomposition of the phosphide, and phosphuretted hydrogen with phosphurous vapour escapes in great quantities, takes fire spontaneously, and burns with a brilliant light.

Pharmacy.

WE have pleasure in giving publicity to the following notice, and have mailed fifty copies August "CHEMIST AND DRUGGIST" to Mr. Crawford for distribution amongst the members:—

"AMERICAN PHARMACEUTICAL ASSOCIATION.

"Notice.

"The Ninetcenth Annual Meeting of the American Pharmaceutical Association will be held in the city of St. Louis, Missouri, on the second Tuesday (12th) of September, 1871, commencing at 3 o'clock p.m.

"With the view of increasing the interest and importance of this meeting, the Committee of Local Arrangements will endeavour to make the display of products in any way connected with the drug business as extensive as possible.

"Specimens of crude drugs, especially such as are indigenous to the West and South, will serve to illustrate the *Materia Medica* of the great Valley of the Mississippi, and are particularly desirable articles for exhibition; they should be delivered, free of expense, to Wm. H. Crawford, Local Secretary, St. Louis, accompanied by an invoice and description.

"It is earnestly hoped that all who are eligible and who are not already members will become such, and thus more nearly equalise the representative number of members among all the States, which would greatly increase the usefulness of the Association, and render it more national in character.

"R. H. STABLER, M.D., President,
Alexandria, Va.

"WM. H. CRAWFORD, Local Secretary,
St. Louis, Mo."

LADY APOTHECARIES.

Recently, in Pomerania, a lady, Phillipina Mangelsdorf, passed the examination, and acquitted herself very creditably. She is the first female who has been added to the rolls of Pomeranian pharmacy.

FRAUDULENT SUBSTITUTIONS.

The *American Journal of Pharmacy* for July says it has been informed that the publication of Mr. Bullock's paper, on page 92 in its February number, has not stopped the fraudulent sale of muriate of cinchonia for sulphate of quinia, but that, on the contrary, it is being sold quite largely, under the label of Pelletier, Delondre et Levailant. It also states that sulphate of quinia is being sold for sulphate of morphia, and labelled as the make of Atkinson, of London.

Condurango is the name of a vegetable medicament found in Ecuador, for which great medicinal virtues have been recently claimed in the United States. The most valuable portion of what is said to be a tree are the wood and bark. Ecuadorian testimonials are published and supported by U.S. officials who possess a knowledge of the country. It is reported as a remedy for cancer, fungus, hæmatococles, and constitutional syphilis, but the report we have seen in the *American Journal of Pharmacy* is somewhat confused, and we have heard that some clever patent medicine house is at the bottom of the matter, with intent to gull the public with scientific and other testimony as to some new "Condurango Heal All!"

Since writing the above, we have come across the following in the *Chicago Druggists' Price Current*:—

"We have learned that the condurango cure for cancer is an unmitigated humbug. The article, or some article called condurango, was patented as a cancer cure, and then this story of its wonderful properties was given circulation at the expense of the associated press, Secretary Fish being used as a kind of cat's-paw. The ingenuity, audacity, and success of the conspiracy to thus introduce a patent medicine speedily and cheaply challenge our admiration more than the cures said to have been wrought by it."

Our Victorian advices inform us that concurrently with the Amended Medical Bill, a Pharmacy Bill is to be introduced into Parliament. Hitherto the druggists have been under no legislative control whatever. But the Pharmaceutical Society, established about sixteen years ago, has

lately been revived, and a bill, based upon the English Act, has been prepared. It is expected there will be a good deal of opposition to this, as nearly all the storekeepers of the country sell drugs.

QUASSIA FOR SURGICAL DRESSINGS.—"Flies cannot bear the smell of the wood, maggots are therefore entirely avoided," says Mr. C. C. Mitchinson, in the *Lancet*. The use of an infusion of quassia, as a dressing for open wounds and ulcers, in hot climates, and during the prevalence of hot weather, he recommends, and states that in the United States army, after one of the James River engagements, 500 wounded men, under the care of a friend of his, were treated in the above manner.

THE POLLUTION OF RIVERS BY MANUFACTURES.

THE Commission appointed to make inquiries into the pollution of rivers caused by any particular manufacture, have published the result of their investigations. These extend not only to clothing districts, but also to the flannel trade, blanket, worsted and rug factories, and carpet works. To make their observations more easily understood, a coloured map accompanies the report, showing the localities chiefly influenced by the processes in question.

Around the localities of Bradford and Leeds, of Halifax, Huddersfield, and Wakefield, are collected many gigantic establishments, the principal example being taken from that of Sir Titus Salt, Bart, and Sons, who employ 3,500 hands. Here the materials used annually are quoted in detail, representing enormous quantities of logwood and similar dyewares, chloride of lime, ammonia, and oil of vitriol, Gallipoli oil, soap, alkali, and coal. In consequence of this and other like establishments, the beds of the rivers have been silted up, and where formerly trout were very plentiful, now no living thing can exist except rats.

In the West of England we learn that the character of the pollution due to the manufacture of short wool can be nowhere better studied than on the small streams uniting below Stroud, in Gloucestershire. Upwards of 25,000 pieces of cloth are made in this district annually, and the greater part of this large quantity is black and blue cloth. But in the worst instance, where the water was found to be tinted with dye, the pollution was not greater than the Thames at Hampton Court; and in no part of Gloucestershire was there a nearer approach than this to the condition of the frightfully polluted streams of Lancashire and Yorkshire. The drainage liquors from wool factories are ascertained to be not less polluting than those of calico print works.

The experience gained, has led the commissioners to certain definite conclusions that will enable the legislature to deal with this important question. They recommend that the casting of any solid matters, of whatever kind, into rivers and running waters be absolutely prohibited, and that immediately; that the discharge of any polluting liquids, which transgress certain limits assigned, shall be prohibited, but a reasonable time be allowed for the execution of the necessary works for purification. They recommend also that all rivers and streams in England be placed under the superintendence of central boards, whose duty it will be to exercise a surveillance over both the quality and quantity of the water supply of towns, and to investigate all schemes connected with river conservancy, and to refer such matters for the consideration of one of her Majesty's principal Secretaries of State.

ABOLITION OF FAIRS.—An Act of Parliament has just been passed to amend the laws relating to fairs in England and Wales. It recites that certain of the fairs held in England and Wales are unnecessary, and are the causes of grievous immorality, and are very injurious to the inhabitants of the towns in which such fairs are held, and it is therefore expedient to make provisions to facilitate the abolition of such fairs. The Secretary of State may, on representation of magistrates, with the consent of the owner, order fairs to be abolished, notice of the representation and of the order of the Secretary of State to be published in the newspapers.



YOUNG'S PATENT POISON CABINET.

OUR readers will remember we illustrated and described the above very fully in our issue of September 15th, 1870. It is now being introduced to the trade, in a very practicable form by Messrs. Maw, Son, and Thompson, and as it is one of those things that to be appreciated should be seen, we recommend a call at 11, Aldersgate-street.

ORANGE QUININE WINE.

MESSRS. GOODHALL, BACKHOUSE, & Co., are introducing this to the trade in effectively got up bottles, with patent cork-lined stoppers; the wine itself is very palatable, and its producers name Howard's as the quinine employed. It retails at 1s. and 2s. per bottle, and if the trade allowance is liberal, we should think it likely to command a large sale.

APPARATUS FOR DIVIDING POWDERS.

GEORGE P. ALLEN, of Woodbury, Conn., has, the *Scientific American* states, invented an apparatus for proportioning and dividing powders, being intended to provide a simple and efficient means whereby druggists may quickly separate a mass of powder into any given number of equal quantities for doses, instead of the slow and inaccurate method of dividing with the spatula now employed. The invention consists of a board or plate of any kind or substance best suited for the purpose, having any required number of holes or pockets of uniform size and shape made through or in it, and each hole provided with a movable bottom or piston arranged for shifting quickly, to vary the depth of the pocket, all the said bottoms or pistons being arranged so as to move equally in relation to the plate or holes therein. In using this instrument the mass of powder is placed on the table, and scraped over the holes so as to fill as many as the number of divisions required. If it fails to fill as many holes as the said divisions require, the pistons are raised or the plate lowered, as the case may be, by which the powder in the filled pockets will be raised above the surface, so that some of it may be scraped into the holes not filled, which being done, and the requisite number of holes filled, the division is completed. The pistons are then raised to the level with the table, and the powder raised up in separate piles, to be scraped away. The pistons are shifted downwards, and the operation of dividing the powders is carried on in like manner, if the pistons are too high at first.

INDIA-RUBBER POISON CAPSULES.

MR. H. C. BAILDON has introduced these. Their use necessitates no altered arrangements, must call attention to contents, and evaporation is of course prevented. Each capsule is stamped on one side *poison*; this, we think, might advantageously be done on both sides. Mr. Baildon, who should be an authority, states in his circular "that his capsule supplies the least expensive of the three plans recommended by the Council of the Pharmaceutical Society. That their general adoption by the trade would fully meet all the requirements of the Pharmacy Act, and effectually prevent any interference by the Government or Parliament with the freedom of action of the members

of the Pharmaceutical Society, which will certainly be endangered if this, or some other plan be not voluntarily adopted." It appears to us the idea may be elaborated and applied to travelling flasks, as sold filled, inks, patent medicines, etc. However, Messrs. Maw, Son, and Thompson, who are the wholesale agents, are not likely to overlook how to make the most of the idea.

SANITARY SACHET.



WE are favoured with a specimen of Shaw's Sanitary Sachets; the style of production is good, as our illustration shows; the covering is of variegated silk, and the disinfectant carbolic acid, the odour of which is well covered. Mr. Shaw, we think, is justified in stating that his sachet is "a fragrant perfume and neat ornament combined."

Further trade particulars are noted in our advertising pages.

PHYTOSMEGMA.

THIS is a name given by Mr. Pooley to a new preparation for cleansing plants and destroying insect life. The manufacturer claims that these benefits accrue without causing the slightest injury to the tenderest foliage. Phytosmegma is a clear amber-coloured liquid, without unpleasant smell, and is effectively got up, the sixpenny bottles containing two ounces. Its application may be effected either with sponge, brush, or showerer. We have the latter before us of the sixpenny quality, and a very good sixpenny worth it is.

ALEXANDRA OIL.

MESSRS. THOMAS, of Exeter, have sent us a specimen of their Alexandra Oil. It equals anything we have seen, and the West of England may be congratulated on having such a supply within easy distance. So far as eye and nose can decide, it is all we can hope for; but its late arrival has precluded accurate testing. We are assured on independent and good authority that its specific gravity is light, its brilliancy unsurpassed, and its flashing-point very high—all points of value, as our readers are aware.



MIDLAND COUNTIES' DISPENSING AND RETAIL PRICE BOOK.

IN January, 1870, we noticed the first edition of the "Midland Counties Chemists' Association Dispensing and Retail Price Book." It has been so far appreciated as to render a second edition necessary. Its authors state that the tariff is based upon the present market values of genuine and pure materials; that the public frequently misrepresent the prices paid at other establishments; and they state, if the Council of the Association be advised of any member's variations, etc., the complaint will be inquired into.

The first dispenser of a prescription is asked to stamp his name, etc., and affix the price charged, and if from any cause specially low price be affixed, the letter E be added, denoting exceptional.

The price list cannot fail to prove useful to those outside the Association, to whom it specially applies. Its price, etc., is mentioned in our advertising columns.

PATENT MEDICINES IN THE UNITED STATES.

WE are in receipt of the trade catalogue of Mr. J. F. Henry, of New York. It contains over eighty pages, and gives a good idea of how energetically the Americans force this business. In balsams there are between forty and fifty proprietary names. No less than fifty-seven lines are devoted to bitters, Brother Jonathan being the most dyspeptic amongst nations. Nine kinds of brandy are included. The address to the trade may be read with advantage by many out of the United States, and looking to our knowledge of the questionable mode of trading by many American firms, we are pleased to find the following paragraph included in the trade notice:—

"I keep *genuine goods only*, and will at all times oppose the introduction and sale of counterfeit articles. My customers may therefore rely on getting goods that are guaranteed to be genuine in all cases, as I will neither countenance nor recognise any fraudulent attempt to imitate the trade marks of others under any circumstances."

The *italics* are Mr. Henry's.

POISONING AND PILFERING.*

THIS little book professes to speak of facts, and we gather from its perusal, it is written by a colonist resident in London, to his friend "Charley" at the Antipodes. The author appears to have literally fallen amongst thieves. He ventilates his views in poetry, and we extract a few lines here and there:—

"Scarce an article bought—or it seems so to me—
Is really the substance you, take it to be:
There is hair sold as wool, there is cotton for flax,
There is sugar for honey, and tallow for wax."

"And in cocoa—which doctors commend—
There are poisonous things without number,
For there sago and arrowroot blend
With chalk, and red ochre, and umber;
And potato, and sugar, and flour,
With oxide of iron and oil—
And the husk they put in, too, has pow'r
The invalid's breakfast to spoil."

The writer thus alludes to co-operative stores:—

"There are stores on a very large scale
Which by Government clerks were constructed,
And where moderate prices prevail—
On the plan of 'no profits' conducted.
At once to producers they go,
To the maker, the grower, importer,
And they save p'rhaps a fourth part or so—
The retailers would give them no quarter."

The author closes with an appendix in prose, giving extracts from the public press in verification of his charges.

USEFUL CHEMICAL TABLES.*

THIS little publication consists of three tables—oxides, sulphides, and chlorides—and several corresponding blank forms, with a few observations on the arrangement and use of the tables. A description of one of the tables will suffice to show the arrangements adopted, and the purposes for which they are adapted. The table of the oxides, for example, consists of seven principal columns; the first of these is divided into fourteen spaces by dotted lines, which are continued across the other columns; each space contains a formula, in which the radical is represented by X, thus— XO_1 , XO_2 , XO_3 , etc. The author has adopted this succession, because he considers it easier to work the tables with than the more correct succession— X_2O , XO , X_2O_1 , X_2O_3 , etc. The other six columns are divided vertically into sixty-one small columns, at the head of each of which stands the symbol of one of the elements; the metalloids in red, the metals in black type, and the rare metals in *italics*. The elements are

* "Poisoning and Pilfering, Wholesale and Retail, etc." By the author of "John Jerningham's Journal." London: Longmans and Co. 1871. Price 1s.

† "Useful Chemical Tables, arranged for the Use of Teachers and Students." By Adolphus Colletette. Guernsey: Frederick Clarke.

grouped as monads, dyads, triads, tetrads, pentads, and hexads; in this grouping the maximum quantivalence is given in doubtful cases. The symbol of each element is repeated in the spaces opposite those formulæ in the first column, which represent the compounds which the element is known to form. For example, under the hexads we find Fe in the spaces opposite XO_1 , X_2O_3 , X_3O_4 , showing that there are three oxides of iron. We cannot entirely agree with the author concerning the manner in which some of the compounds are tabulated; the oxides N_2O_2 and N_2O_4 would be more correctly represented by the formulæ NO and NO_2 , if the specific gravity of these gases is to be taken into consideration; and, again, it would be better to wait until the constitution of ozone is more accurately determined before we assign to it the formula O_2O . Several of the metals whose compounds are tabulated are very rare, and consequently are of but little importance to the ordinary student, so that, so far as he is concerned, they might have been excluded. On the other hand, there is no notice taken of the very important compounds of the hypothetical metallic radical ammonium; it deserves mention at least. The blank forms—an additional supply of which, or of the tables, can be had separately—may be used for the tabulation of other compounds, or for exercises; used in this way, we have no doubt that they will be found an excellent means for the communication of much valuable information. Finally, the price of the tables is such as to place them within easy reach of the humblest student of chemistry.

NEW BOOKS.

HAVING SPECIAL TRADE INTEREST.

DENTISTRY, Principles and Practice of. C. A. HARRIS. 31s. 6d., cloth.

BONE SETTING. W. P. HOOD. Cr. Svo. 4s. 6d., cloth.

METRIC SYSTEM OF WEIGHTS AND MEASURES, Theory and Practice of. Professor L. LEVY. 12mo. 1s., sewed.

LAWS AFFECTING MEDICAL MEN, Manual of. R. G. GLENN. 14s.

Provincial and Foreign Reports.

[We shall be glad to receive from all parts of the world items of interest to our readers. Correspondents who favour us with reports of local meetings, etc., will please to condense them as much as possible; and when local newspapers are sent, we shall be glad to have the passage intended for our notice specially marked.]

LEEDS.

A MEETING of subscribers to the fund for opposing the late Pharmacy Bill was held in the Library of the Leeds Chemists' Association, on Monday, August 7th, 1871, Mr. WILLIAM SMEETON, President of the Chemists' Association, in the chair, when it was unanimously resolved:—

"That the hearty thanks of this meeting are due and are hereby tendered to William McCullagh Torrens, Esq., M.P., for his opposition to the late Pharmacy Bill."

"That the best thanks of this meeting are due and are hereby tendered to Edward Baines, Esq., M.P., Mr. Alderman Carter, M.P., W. St. J. Wheelhouse, Esq., M.P., C. B. Denison, Esq., M.P., and J. Feilden, Esq., M.P., for the courtesy and attention with which they received the representations made to them of the objectionable character of the late Pharmacy Bill, and for the grounds which most of these gentlemen have given their constituents for believing that they would have opposed its second reading."

"That this meeting approves of the decision of the Chemists' Defence Association, and of the Metropolitan Chemists' Defence Association, to maintain their organization, and recognises their past valuable services in protecting the best interests of the trade, as giving them additional claims for continued support."

"That the best thanks of this meeting be given to Mr. Smeeton for presiding."

LEICESTER.

The half-yearly meeting of the Chemists Assistants' and Apprentices' Association was held at the Rooms, Halford-street, on Friday, August 4th; the President (Mr. W. B. Clark) in the chair. The honorary Secretary, Mr. T. Wright, read the following report:—

During the session, one member has passed the minor examination with honours, and two have succeeded in the preliminary. During the half-year, five papers have been read upon subjects of great interest to pharmacists; the Chemistry, Botany, Materia Medica and Latin Classes have been regularly attended, the average number present at each class being eight. W. S. Grigsby, Esq., has very kindly taken the management of a class for the preparation of students for the preliminary examination, and as this gentleman's services are entirely voluntary, the Committee take this opportunity of tendering him their grateful thanks, especially as the rapid advance of the apprentices of the Association proves that the talents of Mr. Grigsby, coupled with his admirable method of teaching, have not been thrown away. The financial affairs of the Association are not in so prosperous a condition as usual, owing to the great expense of the very convenient rooms in Halford-street; but the Committee trust, with the sustained help of the principals, to meet the difficulty. Finally, the Committee believe they have reason to congratulate the members upon the great success the Association has had, and is still increasingly having, in achieving the purposes for which it was formed. The report having been read, Mr. T. Wright proposed, and Mr. W. E. Hill seconded, "That Mr. W. S. Grigsby, and Mr. J. W. Burton, be elected honorary members;" carried. The honorary secretary then read the names of the gentlemen nominated to form the new committee; Mr. Joseph Young refusing to stand, and only eight having been proposed, the remaining seven were declared to be duly elected. The elected members then separated to choose the officers by ballot, with the following result, Mr. W. B. Clark declining the honour of re-election as President:—Mr. W. E. Hill (A.P.S.), President; T. Wright (A.P.S.), Vice-President; W. B. Clark (P.C.), Treasurer; W. B. Blunt (A.P.S.) Honorary Secretary; E. H. Butler (A.P.S.); W. Thirlby (A.P.S.); S. H. Cadoux.

LAW AND POLICE.

A CARELESS LARK.

MR. AUGUSTUS JAMES CORBIN, a partner in a firm of chemical manufacturers in Wilson's-yard, Upper-street, Islington, was charged on Thursday, at the Clerkenwell Police-court, with having thrown a quantity of coal-tar and naphtha upon a cooper named Clark, who was at work upon the defendant's premises. According to Clark's account, Mr. Corbin and one of his clerks were "skylarking," and the defendant upset a case of naphtha and coal-tar—which Clark was carrying—over the poor man's head. The stuff went into his eyes, and caused him great agony. This was on the 16th June, and the complainant is still under medical treatment, and unable to work. The defendant was remanded on bail.

A DRUGGIST CONVICTED OF ARSON.

Jeremiah Burrows was indicted, at Derby, July 15, for setting fire to his dwelling-house with intent to defraud the Royal Insurance Company. Mr. Mellor and Mr. B. Pope appeared for the prosecution, Mr. Cave for the defence. The prosecution was instituted by the police, the insurance company not disputing their liability. The prisoner is a tradesman carrying on business at Pinxton, near Alfreton, as a general dealer of drugs, etc. He had insured his stock-in-trade in 1869 for £200, and during the present year had increased his insurance to £400, stating as his reason for doing so that a fuse or fusce had been put under his door, and that bad characters were about, and that he therefore thought it prudent to do so. On April 11, the night of the fire, the prisoner and his wife went to bed between ten and eleven o'clock, but Dr. Elmes, who was lodging in the house,

sat up reading till about half-past two. Dr. Elmes, about half-past twelve, heard a knock and went downstairs, and told the person, who wanted some tobacco, to go away and not disturb the house. Later on in the night he heard someone walking about at the back of the house. He went to bed at half-past two; at half-past four he was aroused by the prisoner's wife, and found his room full of smoke. He went downstairs just as the prisoner was returning from calling up his neighbour, Mr. Booth. The fire was put out in a quarter of an hour. The effect of the prisoner's subsequent statements was that someone must have got into the house through the back window, as a pane of glass was broken, and stolen £30 which he had placed in a drawer, two large cheeses, and two sacks of flour; and had, to prevent detection, lighted in the interior of the shop the rolls of paper which were found partially unrolled and burning in different places, and had subsequently attempted to burn Mr. Booth's house, where there had been an attempt at arson. Mr. Justice Hannen, in summing up the case, alluded to the fact that it was the most important case that had to be investigated during the assizes, and then said that whoever set fire to the house could not have been sure that the lives of the inmates would not have been sacrificed; that it was clear that the premises were set on fire intentionally, for the heaps of articles found burning must have been set fire to separately; and that it was clear that the fire arose after half-past two, for it was not until that hour that Dr. Elmes went to bed. If the fire had been caused by burglars, they had done so in order to escape; if that was so, it was strange that they should have encumbered themselves with the flour and the cheese, and left the money in the till. His Lordship then stated that the theory of the prosecution was that the prisoner set fire to the house in order to obtain money from the company. It could not be disputed that he was in embarrassed circumstances, as he was shortly after a bankrupt, and paid 10s. in the pound; but still at that time he was not being harassed for money. The jury found the prisoner guilty. His Lordship sentenced him to five years' penal servitude.

A CHEMIST AND DRUGGIST ACCUSED OF DEFRAUDING A RAILWAY COMPANY.

At the Thames Police-court, on the 21st ult., Mr. George Dickens, a chemist and druggist of No. 175, High-street, Poplar, appeared to answer a summons of the North London Railway Company, which charged the defendant with unlawfully neglecting and refusing to deliver up his ticket at the Poplar station of the North London Railway on the 6th of July. Mr. Cooper, solicitor of the North London Railway, said the defendant, a lady, and child alighted from East Ham at the Poplar station and offered to the ticket collector three tickets for the Fenchurch-street station of the Great Eastern Railway, with which the North London Company had nothing whatever to do. The proper tickets were demanded and refused, and the defendant refused to pay one farthing for his ride and the ride of himself and companions. The defendant, in reply to the charge, said the North London Railway Company were all in a muddle in this transaction. He asked for one ticket at the East Ham station for Poplar, and had nothing to do with the lady and child. A ticket was given to him for the Fenchurch-street station, and he called the attention of the booking-office clerk to the ticket, and he said that would do and that the ticket would pass at Fenchurch-street or Poplar. On this assurance he accepted the ticket, and he was very much surprised when it was rejected and the fare was demanded of him a second time. The amount of fare to Fenchurch-street and Poplar was 6d. to either place. Mr. Paget, the magistrate, could not see what offence the defendant had committed. Mr. Cooper: He rode on our railway without payment. He might as well have offered a Crystal Palace ticket or one for the Liverpool railway as the one he did offer to us. Mr. Paget: If the defendant has been guilty of any offence it is a violation of the first by-law in travelling without a ticket. Mr. Cooper: He offered us a ticket belonging to another railway company which we could not recognise, and he has been guilty of an offence under the second by-law of our company. Mr. Paget asked if the Great Eastern Company had not a station on their line at Poplar. Mr. Cooper said there was a station on the Great Eastern line at Poplar, but the way

to it from East Ham was by Stepney and past Limehouse and the West India Dock stations. Mr. Paget said there was no ground whatever for supposing the defendant intended to defraud the North London Company or any company, and he had been led into an error by the clerk to the Great Eastern Company at East Ham. He dismissed the summons. Mr. Dickens asked for compensation for his loss of time, and said he only required 5s. He was compelled to leave an important business in charge of his wife. Mr. Paget said the demand was so reasonable and just that he should order 5s. costs. Mr. Cooper paid the money, which Mr. Dickens handed to Mr. Odell, chief usher, for the poor-box, and the attorney asked the magistrate to grant him a case for the decision of a superior court. Mr. Paget said he could not grant a case.

ACCIDENTAL POISONING CASE AT ASTON, JULY 25.

We need make no apology for bringing before chemists and druggists a case of accidental poisoning which possesses great interest. Without giving a formal report, we shall notice the plain facts of the case and its bearings; and although the adjourned inquest prevents full details being known, yet the evidence already adduced furnishes all important particulars. The victim, a labouring man, named John Bullock, aged 71, had been attended by Mr. Hoare, surgeon, of Aston, and it appears a month previous to the fatal occurrence met with a severe accident, whereby he fractured his collar-bone and two ribs. This necessitated medical supervision, under which the patient was progressing satisfactorily, although troubled with a bad cough. For the latter a linctus was prescribed, and a liniment was also ordered to be rubbed into the chest and ribs. On the night of July 24th, Bullock himself attended at Mr. Hoare's surgery, and is stated to have handed in the linctus bottle and asked for a fresh supply of liniment. Mr. Hunter, who, it appears, has been articled five years, and for sixteen or seventeen months lived with Mr. Hoare as assistant, dispensed and delivered the bottle to Bullock. From the evidence of the wife of the deceased, the latter took a teaspoonful from the linctus bottle on the following morning, and immediately cried out, "Oh, it's that bottle!" and complained of intense burning inside. Mr. Hoare was at once sent for, but evidently did not regard the case as very serious, and sent a stimulant mixture, at the same time communicating with his assistant. The latter expressed surprise that he could commit such a mistake, expressed becoming regret, and hurried off to see the unfortunate man, who was vomiting, and in great agony. Mr. Hoare having been convinced, on the return of his assistant, that the case was serious, did what he should have done before, and arrived in time to see poor Bullock expire. It was elicited in evidence that the linctus and liniment bottles were of different colours, as well as their contents. The *post-mortem* examination made by Dr. Jolly showed that the man had an extensively diseased heart; and this piece of evidence gave rise to a not very pertinent inquiry from a juryman, as to whether the deceased might not have died any day from the same. From the facts adduced, it will be seen that the deceased fell a victim to a careless mistake, whereby a liniment containing a deadly irritant poison—aconite—was dispensed in a bottle labelled "The linctus to be taken as before." It seems incredible that a person accustomed to dispense medicines could be guilty of such negligence as to send out a poisonous liniment without affixing a poison label to the bottle, or making sure one was already affixed. We make bold to say that had a chemist and druggist been the offending party, the whole trade would before now have been subjected to the unscrupulous and indecent attacks of the press, as in a recent instance, when a contemporary disgraced its respectable pages with a tirade of shameful abuse directed against a conscientious and efficient body of men. The case we have referred to is still *sub judice*, as the inquest stands adjourned to allow of analytical examination of the human viscera. Should any new feature of the case arise, we shall notice it further in our next.

SMITH v. REEVES, FALSELY CALLED SMITH.

This was a suit in the Divorce Court for nullity of marriage, instituted by the father of the husband, on the ground of undue publication of the banns. Dr. Deane, Q.C., and

Mr. Bayford, appeared for the petitioner. The petitioner was the son of a chemist and druggist, at Liverpool, and he had formed an improper intimacy with the servant of a medical man, at whose house he was residing as a pupil. He contracted a clandestine marriage with her, and the bans were published in the name of John Smith, his real name being John James Smith. It was proved that he was generally known by the name of James Smith. A decree of nullity was pronounced.

A LONDON DRUGGIST DEFRAUDED.

At Bow-street, William Howard, described as a publishing agent, was charged with obtaining £12 7s. from Mr. E. A. Akhurst, chemist, Lambs' Conduit-street, by false pretences. The prisoner, who had been a customer at the shop, asked the prosecutor to cash an order for £12 7s. 2d. upon "Hughes and Co., 10, Southampton-street, Strand," representing that the latter were his bankers, but he was in immediate want of the money. The order, on being presented, proved to be fraudulent, there being no "banker" at the address given, but merely a publishing office, kept by a Mr. Hughes, who repudiated the transaction. In cross-examination the prosecutor admitted that he cashed two checks for the prisoner on former occasions, both being genuine, and that he had intimated through Chamberlain, the detective officer, that he was willing to withdraw from the prosecution on the amount being paid. The defendant was committed for trial at the Middlesex Sessions, and tried August 10th, found guilty, and sentenced to imprisonment, with hard labour, for one year.

POISONING BY AN OVERDOSE OF MORPHIA.

We condense the following from the *Tiverton Gazette*; it is the case that gave rise to the remarks in the *Pall-Mall Gazette*, and which are noted elsewhere:—An inquest was held at Sidmouth to inquire into the death of William Ellis Wall, gentleman, residing at Salcombe Regis. Mrs. Wall deposed to the deceased having written out a prescription, and sent it by a servant to Mr. Webber, chemist, to be made up. He then went to bed, and, not having received the draught, he sent the girl again to Mr. Webber's at nine o'clock to fetch it, she brought back a bottle (which was produced) and, following the directions on the bottle and her husband's previous directions, Mrs. Wall gave him one-half the mixture immediately. Directly afterwards, the housemaid came to say that the wrong medicine had been sent. In about five minutes her husband began to breath unnaturally. She sent for Dr. M'Kenzie, who, with Dr. Atkins, met the servant in the drive. Mr. Wall said that her husband was in the habit of taking opium, and of prescribing for himself. He had taken but little substantial food during that or the previous day, but on Saturday had drunk three large bottles of champagne. The servant said she was sent with the prescription by her master in the afternoon, and again in the evening, when Mr. Robert Webber prepared the mixture in her presence. Shortly after, a messenger brought a bottle to the house, saying that Mr. Webber had sent the wrong draught, and requiring to have the previous mixture returned. Walter Pinn, an apprentice, said he was directed by Mr. Robert Webber, about twenty-five minutes to ten, to go as quickly as possible to Mr. Wall's with a bottle, and to say that the wrong medicine had been sent, which he was to bring back immediately. On his return, about ten minutes after, he was sent to ask Dr. M'Kenzie to come to Mr. Webber's. Dr. M'Kenzie stated that he was sent for at about twenty minutes to ten to go to Mr. Webber's and that on his arrival Mr. Webber told him that he had made a mistake, and that instead of putting in half a drachm of solution (equal to half a grain) of muriate of morphia, he had put in a scrupulo (equal to twenty grains) of the drug, half of which quantity would kill any habitual morphia taker. Dr. Atkins was in the shop, and they both hastened to Mr. Wall's, taking materials for a powerful emetic. Dr. M'Kenzie described Mr. Wall's symptoms and the remedies which were applied. Mr. Wall died about a quarter past three on Sunday morning. A *post-mortem* examination showed that death was caused by an overdose of morphia. Mr. R. Webber was in the room the whole of the time, rendering any assistance that was in his power. Confirmatory evidence having been given, the coroner, in summing up, said that the evidence clearly established that

death was caused by an overdose of morphia; and pointed out that if a man undertook an office requiring care and skill, and by his want of skill or negligence caused the death of another, the law held him guilty of manslaughter; and it would be for the jury to consider whether the prescription had been prepared with the skill and care the law required, and find their verdict accordingly. The jury in about a quarter of an hour, found a verdict of "Death by misadventure," requesting the coroner to admonish Mr. Webber to be more careful for the future, which he did.

[P.S.—At the last moment we are in receipt of a telegram from Mr. Webber to the following effect:—

"Prescription was
Sol. Morph. Mur. ʒss.,
but written indistinctly; have not copy of prescription."
ED. CHEMIST AND DRUGGIST.]

Trade Memoranda.

DR. POLECK calls attention, in the *Polytechnisches Journal von Dingler* for May, to a peculiar change which takes place in flour kept in casks. The gluten of the flour loses its capability of being converted into a good dough, and acquires a peculiar musty smell. The cause of this is referred to the absence of air; therefore the remedy is obvious.

"Grocers: Their Friends and Foes," is the heading of an article in a recent issue of the *Grocer*, defending the trade from the indiscriminate attack of the public press, and pointing out that the Teadealers and Grocers' Association, has been amongst the most active in calling the attention of the Board of Trade to the horrible Maloo mixture.

Dr. Robert, of Paris, recommends the salts of copper as the best preservatives of stone in a moist climate. These act by preventing the formation of minute lichens, which he supposes produce the disintegration of the stone. There is no doubt but this is true of granite, but we doubt if it is so of the sandstones, which usually "weather" by exfoliation, which is quite independent of any vegetable growth.

We have for some time past been dependent upon Bolivia for our supply of the metal bismuth; and, owing to the limited supply, the price of this metal has been very high. It is now found in large quantities in Australia. The *South Australian Register* informs us that at the Balhannah Mine this metal exists in large quantities, and that smelting-works are built on the mine for extracting it from the ore.

M. A. Baeyer, in *Ber. Deut. Chem. Ges. Berlin*, has described the production of a new colour from pyrogallie acid. Crystals of galleine are first produced, and these are converted into a substance named coruleine. This dissolved in sulphuric acid produces an olive-brown colour; with aniline it forms a rich indigo blue, and with alkalies it gives a fine green. These colours are readily imparted to cloth, and are of considerable permanence, resisting the action of soap.

A New York firm has been manufacturing bitters which they claimed contained neither alcohol nor wine, and to which they, therefore, affixed only a four cent stamp. It being suspected that the Government had been swindled, a sample of the "bitters" has been analysed by order of the Internal Revenue Bureau, and found to contain ten and nine-tenths per cent. of alcohol, and nineteen per cent. of sherry wine. The mixture is, therefore, liable to a tax of 6 dols. on each dozen quart bottles.

The IRONMONGER, a journal very much after our own model, gives in its issue of July 31st a very full report of the exhibits at the Royal Agricultural Show, Wolverhampton. We extract the following as suited to our title and scope:—

Stand 106. H. J. Walduck and Co., Market-street, Manchester—Samples of Warton native oxide of iron for use as a pigment, and mills for mixing the same. This pigment

has a good colour and body, and the work shown with coatings of it look very well and substantial.

Stand 271. James Sinclair, Manchester, exhibited a number of chemical fire extinguishers, and his "Ne Plus Ultra" respirator.

Mr. W. G. M'Ivor, Superintendent of the Cinchona Plantations in British Sikkim, has published a lengthy report, of which *Nature* gives the following abstract:—"The plantations are situated in the Valley of Rungbee in the Himalayas, which seem admirably adapted for the growth of cinchona. The climate is very moist, being rarely free from rain. Nevertheless, the state of the plantations is reported as very unsatisfactory; the plants have nothing like the luxuriant foliage which characterises those grown in Southern India on the Neilgherries. They seem to thrive for three or four years at the most, and then become diseased." Mr. M'Ivor says that trees of equal height do not produce so much bark as in the South of India, being of more slender growth, and the bark being thinner.

NAVY ESTIMATES.—The House went into Committee of Supply on the Navy Estimates, on the 8th inst., and voted £67,300 for medicines, medical stores, etc.

NAPLES EXHIBITION.—We are gratified to observe that Messrs. F. C. Calvert and Co., of carbolic acid fame, have received a silver medal of the first class at the above Exhibition.

EDUCATIONAL FACILITIES.—A reference to our public pages will show that Dr. John Muter, of Kennington, is offering considerable facilities in the way of practical teaching of chemistry and pharmacy.

OUR COAL SUPPLY.—It is stated that the labours of the Royal Commission on Coal, appointed a few years ago by Sir George Grey, are on the point of completion, and the result is the demonstration of the fact that, assuming a certain annual increase in the rate of consumption, sufficient economically gettable coal exists in Great Britain and Ireland to last for 800 to 1,000 years.

ADULTERATION.—A circular on the above subject, issued by the Anti-Adulteration Association, Limited, has come under our notice. The association's objects curtly put are, to enforce and amend the laws on the subject, the enforcement to be carried out by appointing analysts throughout the country, and by the prosecution of wholesale distributors of adulterated articles. If the necessary public support be afforded, the association will have a large business ready to hand, and will confer a great public good. One mode of eradicating the evil is educating the public to recognise the different articles in their pure and impure state. The offices are at 6, John-street, Adelphi, where prospectuses may be procured.

METHOD OF RENDERING WOODEN TAPS IMPERVIOUS FOR LIQUIDS AND PREVENTING THEIR CRACKING.—Dr. E. Kopp.—The taps are placed in molten paraffin heated to from 110° to 120°; by this means the water is eliminated from the wood, and the wood becomes thoroughly impregnated with paraffin. The taps are not removed from this bath until all the aqueous vapour has been expelled and left, after the removal of the vessel from the fire, in the molten liquid up to the very moment the paraffin begins to solidify. Wooden taps thus prepared are very durable, do not become soaked with liquids, keep very tight, and are not liable to become mouldy. The excess of paraffin is wiped off with care, and the taps are next rubbed clean with a piece of flannel.—*Chemical News*.

DISCOUNTS.—Can any person inform us, asks the *Lithographer*, what was the origin of the custom of allowing discount? We know of only two conditions of business in which it can serve any good purpose. Firstly, on goods for re-sale a discount may be useful to regulate the profit of the retailer without elaborate calculations and re-costing, which would necessarily consume much valuable time. Secondly,

as an inducement to pay cash instead of taking credit. The habit of taking off a discount has undoubtedly outrun the original intention. In some classes of business it has become the fashion to vary the discount according to the importance of the purchase, the habit of the locality, the responsibility of the purchaser, or the importunity with which a demand may be made. It then goes on to say that in very many articles the extension of discount means the depreciation of quality, and names a few as inks, type, etc.

ALBUMEN FROM BLOOD.—Albumen is now produced on a large scale, at Pesth, Hungary, and in North Germany, from the blood of animals. The serum separating when blood coagulates, consists chiefly of albumen. The best quality of albumen thus obtained is transparent and soluble in water, and is used for mordanting yarns and cloth. At Pesth, blood is dried in flat iron pans, by exposure to air at a temperature of from 100 to 112° F. From 3,000 pounds of blood about 110 pounds of albumen are obtained, at a cost of 29 dols.; 16,200 eggs would yield the same amount of albumen, at a cost of 96 dols. Although the cost of egg albumen is three times as great as that of blood albumen, the former is preferred for dyeing purposes, on account of its purity. Blood albumen of a second quality, darker in colour, but nearly all soluble in water, is used largely in the process of refining sugar.

HEALTH IN THE WATER-CART.—The Commissioners of Sewers of the City of London have recently decided to test the advantages to be derived from the use of Cooper's patent salts for street watering. The area selected seems well adapted, it being one of the most important thoroughfares in the City, viz., from Holborn-bars to the east end of the Viaduct. The time of year chosen, and the period of three months resolved upon, are evidences that the Streets Committee have used considerable judgment in trying an experiment of this nature during the months of June, July, and August, the summer season being the proper time to judge of the sanitary advantages and economical benefits which are derivable from the use of these deliquescent chlorides (of a deodorising nature) mixed with the water in the water-carts. The *modus operandi* is very simple. A covering of perforated zinc is fixed over the valve in the water-cart, to prevent the salts from getting into the distributor and choking it. The salts necessary for the day's use are placed on the cart in baskets of a convenient size, and the contents of one basket is put into the empty cart before filling it with water. The water is then turned on, and by the time the cart is filled the salts are thoroughly dissolved. The patentee claims for his invention that it retards evaporation, attracts moisture from the atmosphere, has the great sanitary powers known to chlorides in purifying the air, arresting putrefaction, etc. We are informed that the matter was last year tested by the Westminster Board of Works, and that this year the entire district is being Cooperized.

SELLING GOODS BY SAMPLE.—The *American Grocer* says:—Next to the increased cost, the selling of goods by sample has done very much toward bringing the "drummer," or commercial traveller into disfavour. Many mistakes and losses occur by selling goods in this manner. Sometimes the buyer will forget the exact quality of the sample, and either refuses to receive the goods as "not equal to sample," or demands a reduction in price. Again, the price may have declined between the time the goods were ordered and the time of delivery, and are refused for the same reason. In such cases it is not often possible nor policy to hold the buyer to his agreement, for if carried into the courts, experts must be called, and no end of trouble and expense incurred, hence many merchants prefer to pass the matter over and pocket the loss. An instance has been brought to our attention. A prominent house in this city, some time since, purchased a lot of syrup from a sugar-refining firm to be equal to the sample shown. The syrup was delivered, and part sold before the day of payment arrived, when the buyer claimed that it was not equal to sample, and refused payment, on the ground that it was adulterated. A sample sent to us for analysis proved to be perfectly pure, although

of a low grade, but worth the price agreed upon. In many cases selling by sample for future delivery is considered necessary. In such cases, to avoid disputes, and perhaps litigation, the buyer should require the sample to be sealed, and marked with the seller's signature. The dispute could then easily be decided without having recourse to the courts, which are apt to distrust the defence of "not equal to sample," and to require of the buyer the clearest proof of it.

BURGOYNE, BURBIDGES, AND Co.'s ANNUAL EXCURSION AND DINNER.—The excursion, annual dinner, and athletic sports of the *employés* in connection with the establishment of Messrs. Burgoyne, Burbidges, and Co., the wholesale druggists, of Coleman-street, took place on Saturday, July 22nd, 1871. The party left town at an early hour, in omnibuses and other conveyances, for the Downs' Hotel, Epsom. Immediately on the arrival of the excursionists the athletic sports were commenced by a race of 150 yards for all above 35 years of age. This was followed by other races, a walking match, and two jumping matches. In every case not less than two prizes were offered. On these occasions the excursionists are generally accompanied by a few visitors, but from the fact of their being visitors, are disqualified for contesting in the athletic sports. Through the liberality of the firm a splendid opera glass was offered as a prize to the winner of the visitors' race. Some ten gentlemen started in this race, and the successful competitor was Mr. J. K. Pitt, the well-known cork merchant. The great feature of the day, however, was the race for a handsome silver cup value £10 10s., and which bore the inscription:—"Presented by Messrs. Burgoyne, Burbidges, and Co., as a prize to be contested for at the annual athletic sports." When the company sat down to dinner at half-past two, the cup, placed on a black ebony stand, was a striking object on the table. The fortunate competitor who will have his name engraved on the cup is Mr. F. Goddard, of the packing department. The ceremony of presentation was most interesting, after which the cup was filled with champagne and passed round the whole of the company. The chairman (Frederick Burbidges, Esq.) imparted his genial influence to all around him, and gave a charm to the day's proceedings they would not otherwise have possessed. The usual loyal and patriotic toasts were drunk, and the remainder of the day was passed in a most convivial and agreeable manner. The musical arrangements were carried out most effectually by the members of the establishment.

EUPHORBIA JUICE AS A PREVENTIVE OF SHIPS FOULING.—A correspondent in Durban favours us with the following:—"It may be interesting to many of our readers to learn that a gentleman residing in this colony has recently lodged with the proper authorities a specification of an invention for the utilization of the above juice. The proposed mode of thus utilizing it appears to be a perfectly novel one. It is pretty generally known that when ships have been some time afloat their bottoms (more especially of iron ships) become covered with barnacles, etc. Of course this fouling of their bottoms interferes considerably with their rapid movement through the water, consequently any remedy that may be found to effectually free ships from these growths will be an immense benefit conferred upon ship-owners and others. It is to do away with this evil that the present patent is applied for. It is proposed to apply a coating of euphorbia juice, prepared in a certain manner, to the bottoms of ships, which application, it is stated, will be found to obviate this great nuisance. With a view to proving the utility of this idea several pieces of iron, some partially and others entirely covered with the juice, have been immersed in the sea for some months, and the experiment, so far as it has been tried, has proved a very successful one, no barnacles or any kind of sea-weed being found to have clung to the parts coated with this new kind of varnish. Should the invention prove successful, the great quantities of euphorbia, at present growing wild in the colony, will be turned to good account, and form a new branch of industry in this rising little place. Immense quantities of the euphorbia exist here at the present time, and there is no doubt that this growth could be largely increased, under proper cultivation. It is stated by a high

authority on the subject that the number of species of this plant native to the colony can be little less than 200. The colonial papers speak very highly of the invention, not only as promising to become an excellent remedy for the above mentioned evil, but also as a means of turning the over-abundant supply of euphorbia into a source of new and profitable branch of industry, and for the product of which there would be an unlimited demand.—YOUNG NATAL.”

[Shall be pleased to receive any further matters coming under “Young Natal’s” notice likely to prove valuable.—ED. CHEMIST AND DRUGGIST.]



A VOICE FROM NEW ZEALAND.

TO THE EDITOR OF THE “CHEMIST AND DRUGGIST.”

SIR,—The arrival of the English mail here is looked for with much anxiety, as the months roll round—partly to read the news from home, and partly to welcome the letters of our dear friends. Most certainly, Sir, on reading your valuable journal, we cannot but think how talent and energy combined, in endeavouring with most scrupulous and zealous care to raise the standard of pharmacy in the old country, while here it is quite neglected, and left for mere charlatans to dabble in. In the colonies, New Zealand in particular, you may meet with persons, installed in a shop nicely fitted up with bottles, jars, etc., who style themselves “chemists and druggists,” with some one behind the counter who has a smattering of a few of the names of drugs, and who stays sufficiently long to impart his scanty information to the principal of the house. Such cases are by no means rare in the colonies. I will give you one which came under my own observation. While in practice in the Gold Fields I fell in with a man in charge of a small store or grog shanty (for it could be called nothing better). This individual, I am informed, was by trade a draper’s assistant; he purchased an invoice of badly assorted drugs, to sell in the store. This was the commencement of the draper’s assistant turning apothecary. I imagine he must have done pretty well out of the salts, senna, potash, balsam of copaiba, etc., for shortly he left the Fields, and when I next saw him he was standing at the door of a “chemist and druggist’s” shop. On looking up his name, in bold letters, caught my eye, Mr. ———, “chemist and druggist.” You may judge of my surprise at seeing this individual dubbed a *chemist and druggist*, when I had had an opportunity of knowing not long before that he knew nothing whatever about the quality of drugs, much less of compounding them. This, Sir, is one of a number to be met with here; while I regret to say that good practical pharmaceutical chemists are to be seen driving bullocks, sawing timber, or pursuing some other kind of manual labour to earn their livelihood. It is much to be deplored that the Government do not adopt some step by which a chemist and druggist may be protected from such adventurers. I cannot but think that if the profession in New Zealand were to join and petition the House to have the evil removed, it would be done, just as the medical bill has passed into force here, thereby putting a check on all unqualified persons practising. Before concluding, I would remark on our New Zealand “Poison” Act (a copy* of which I beg to enclose), you will see that it is a complete farce. The only poisons mentioned are arsenic, corrosive sublimate, prussic acid, essential oil of bitter almonds, and strychnine—not even opium and its preparations. I must apologise for the length of my communications.

Yours, obediently,

W. R. G. S., M.R.C.S.

Wanganui, New Zealand.

[* Copy of Act not received.—ED. CHEMIST AND DRUGGIST.]

SIR,—May I request the favour of your inserting the enclosed correspondence in the next number of the CHEMIST AND DRUGGIST?

Perhaps I may be allowed to state that I have not previously had any correspondence, either directly or indirectly, with the Chemists’ Defence Association.

August 7th, 1871.

EDWARD SMITH.

[COPY.]

The Chemists’ Defence Association,
63, Piccadilly, Manchester, July 21st, 1871.

SIR,—The members of the “Chemists’ Defence Association,” and those generally who have opposed the enactment of further compulsory poison regulations, have expressed much surprise, and some indignation, at the support you have given to the members on the Pharmaceutical Council who are in favour of further legislative enactments of a restrictive character.

The following is a quotation from a letter received by me from Mr. Carr, dated March 14, 1871:—

“I may mention I have nominated Mr. E. Smith, of Torquay; he has promised to serve if elected, and is wholly opposed to the majority of the Council on this matter; he has taken great interest in the question, and has published one or two papers on the storage of poisons in the Journal.”

In consequence of this definite guarantee of Mr. Carr’s, your name was with perfect confidence included in the list of candidates put forward by the Chemists’ Defence Association, and without a doubt your election was secured thereby.

As I presume that you have changed your views on the question at issue, I do not see how you can consistently, or in common fairness, continue to occupy your seat at the Council, knowing as you do, that you were returned to support views directly opposed to those you now entertain.

Please to consider this correspondence subject to publication. Awaiting your reply,

I am, Sir, your obedient servant,

E. SMITH, Esq.

ROBERT HAMPSON, *Hon. Sec.*

[COPY.]

Torquay, July 22nd, 1871.

SIR,—I have to acknowledge the receipt of your communication of yesterday’s date, somewhat imperiously, on behalf of your association, calling upon me to resign my seat at the Council of the Pharmaceutical Society, and further erroneously attributing to me a change of opinion respecting the poison regulations.

As I am not a delegate of your association, nor in any way connected therewith, I shall not enter into any correspondence respecting the matters referred to in your note, but must content myself now by distinctly repudiating the authority your association presumes thus to assume over members of the Council of the Pharmaceutical Society.

I am quite ready and most willing at any time to reply to any gentleman, who courteously communicates with me, on the subjects referred to in your note.

Yours,

EDWARD SMITH.

R. HAMPSON, Esq.,

Hon. Sec. Defence Association.

[The following additional correspondence between Messrs. Smith and Hampson has been forwarded to us by those gentlemen, with a request for its publication. Mr. Smith has called our attention to certain orthographical errors in one of Mr. Hampson’s letters to him, which errors likewise occur in the copy received by us. The letters are therefore printed exactly as forwarded to us by each gentleman. In the copies forwarded by Mr. Smith, the letters of Mr. Hampson are preceded by the list of the officers and committee of the Chemists’ Defence Association.—ED. PHARM. JOURN.]

[COPY.]

The Chemists’ Defence Association,
63, Piccadilly, Manchester, July 25th, 1871.

SIR,—I am obliged for the prompt acknowledgement of my note, and, as your reply contains several important mis-

conceptions, it is necessary for me to trouble you with another letter.

Let me, in the first place, disabuse your mind of the mistaken notion that the Chemists' Defence Association has assumed any kind or degree of authority over the members of the Pharmaceutical Council, such authority resting only with the constituents. It has not, therefore, attempted to exercise any authority over you; neither has the association presumed to call upon you to resign your seat at the Council. The letters I have written to Mr. Carr as well as to you are my own personal acts, and in no way authorized by the association. I am at a loss to discover in my letter the imperious tone of which you complain.

I simply call your attention to statements in reference to your nomination, about which, viewed in the light of your subsequent action, there hangs an unpleasant mystery.

Your friend Mr. Carr vouched for your opinion in his letter of March 14, 1871, on the question of the hour, hence your name was included on the popular list, and this undoubtedly conducted to your election.

Can you wonder that there is much astonishment and some indignation manifested by many members of the Society who voted for you, when they found you voting in a most unexpected and incomprehensible manner, and directly opposed to the views they presumed and believed you entertained?

If, with others, I have been so erroneously attributing to you "a change of opinion respecting poison regulations," it is a very pardonable mistake, when I had the authority of Mr. Carr's letter implicitly fixed on my mind.

The only moral that I and others may gain from this unpleasant experience is, that when the prosperity and safety of the Pharmaceutical Society and the freedom of the trade are at issue, it will be well, at any future election, to be certain of the sentiments of those who are to be entrusted with the power of representation.

I am, Sir, your obedient servant,

ROBERT HAMPSON,
Hon. Sec.

E. SMITH, Esq.

[COPY.]

8, *The Strand, Torquay,*
July 28th, 1871.

SIR,—Your letter of the 25th inst. reached me only yesterday the 27th, just as I was leaving home, and I did not return in time to reply the same day.

I cannot but express my great surprise to find that your letter of the 21st was "your own personal act, and in no way authorized" by the Chemists' Defence Association. It seems to me that this is a very awkward way out of a very awkward position.

The very first paragraph of your former letter distinctly says, "the members of the Chemists' Defence Association have expressed surprise and indignation;" moreover, the words *Hon. Sec.* are attached to your signature. Surely, had the letter not been intended as an official document there could have been no meaning in attaching these words to your name nor in heading your letter with "the Chemists' Defence Association," as well as with a list of executive committee; neither could there have been the smallest necessity for saying a word concerning the surprise and indignation of the members of your association.

It is not difficult to see that if I had been constituted of that plastic material of which dummies and delegates are commonly made, the Chemists' Defence Association would have proved itself pretty identical with its *Hon. Sec.*; but now, the association finding itself in a false and untenable position, is anxious to place the onus of its false step on the shoulders of its unfortunate *Hon. Sec.*

Need I point out, Sir, how neatly you have impaled yourself on the horns of a dilemma? Either your former letter was authorized by your association or it was not. If the affirmative be true, then you stand convicted by your second letter; but if the negation be true, then as an honourable man and a gentleman you are bound promptly to withdraw the letter, with its misleading official appendages, and tender a suitable apology.

I must remind you that I before refused to enter into correspondence, simply because you were acting as the

representative of an association having no authority, and consequently no *locus standi*, and for this very same reason I am still unable to correspond with you touching the other matters alluded to in your letters, so long as the words *Hon. Sec.* are appended to your name, or your communications headed with a list of some self-constituted committee.

I again repeat my readiness and willingness to reply to any courteous communication from any gentleman.

This correspondence will be published.

Yours,

EDWARD SMITH.

R. HAMPSON, Esq., *Hon. Sec. to the*
Chemists' Defence Association.

The Chemists' Defence Association,

63, *Piccadilly, Manchester, July 29th, 1871.*

SIR,—The false issue you attempt to raise in your letter of the 29th inst. is both evasive and irrelevant, and is scarcely worthy of notice.

I distinctly affirm in my preceding letter that this correspondence is strictly unofficial, or, in other words, that I have not been instructed by the Executive Committee either to begin or carry on this correspondence. Yet, to suit your own special purpose, you impugn the veracity and honour of the Executive Committee of the Chemists' Defence Association, and likewise my own, by calling in question my affirmations.

I shall not reaffirm my statements, as it is of very little consequence whether you believe or doubt them.

In nearly all my correspondence in reference to matters pertinent to poison regulations I have used the printed note-paper headed with a list of the Executive Committee, and have signed myself *Hon. Sec.* Hence I used the same note-paper in writing to you.

It is likewise *certainly true* that "the members of the Chemists' Defence Association, and those generally who have opposed the enactment of further compulsory poison regulations, have expressed much surprise and some indignation at the support you have given to the members of the Pharmaceutical Council who are in favour of further legislative enactments of a restrictive character."

I simply stated this fact with others; as, for instance, the guarantee your friend Mr. Carr gave for your opinions on the poison regulation question, and your consequent appearance with him on the successful list, as an excuse *sufficient* for troubling you with my letter of July 21st.

It appears, however, useless to continue this correspondence, as you are not disposed to give a gentlemanly credence to my statements; and as you show no willingness to assign any reason for voting contrary to the just expectations of the majority of the constituents who returned you to represent them on the Pharmaceutical Council at a most important crisis, I shall not therefore reply to any further communication you may make.

I am, Sir, your obedient servant,

ROBT. HAMPSON, *Hon. Sec.*

E. SMITH, Esq.

[COPY.]

8, *The Strand, Torquay,*
July 31, 1871.

SIR,—I have this morning received your note of the 29th.

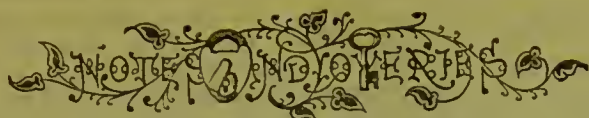
Yours,

EDWARD SMITH.

R. HAMPSON, Esq., *Hon. Sec.*

Chemists' Defence Association Manchester.

BEER ADULTERATION.—The annual report recently issued by the Inland Revenue Department contains a statement by Mr. G. Philips, Principal of the Laboratory, that in the course of the year nineteen samples of materials used in the brewing of beer were examined, and fourteen of them were found to be adulterated. Eight contained grains of paradise; one, grains of paradise and tobacco; one, tobacco; one, liquorice; one, ginger; one, treacle; and one, unmalted oats.



X. Y. Z.—2/600. Will be obliged for a good receipt for Area Nut Tooth Paste and Cherry Tooth Paste.

James Harrison (13/425).—We are not aware that the Board of Examiners have any intention of altering the existing Regulations concerning the Preliminary Examination at present, although we believe the idea of changing the Latin author occasionally has been mooted by some of the members of the Board.

A. W.—26/425 asks—"Can I sell quinine wine, made according to the B. P., and sold in ordinary wine bottles, without a wine licence, and without a medicine stamp, as per label enclosed?" [We think not, as per label; but if the label be modified, and state that the wine is in exact accord with B. P., then we think no licence or stamp would be necessary.—ED. C. AND D.]

T. N., Dublin.—Druggists in England, as with you, frequently add oils and colours to their business. An Act of Parliament such as you speak of was passed in 1868 for Great Britain, but not for Ireland. Further, an Act to regulate the sale of poisons in Ireland was passed July 14th, 1870. The *Calendar* of the Pharmaceutical Society of Great Britain for 1871, will give you full particulars, and it may be procured from 17, Bloomsbury-square for 1s. 3d. post free.

Inquirer.—The subjoined clipping from an exchange may answer your question, while saving us the labour of delving in professional history:—

The title of Doctor was invented in the twelfth century. Irnerius, a learned Professor of Law at the University of Bologna, induced the Emperor Lothaire II., whose Chancellor he was, to create the title, and he himself was the first recipient of it; he was made Doctor of Laws by that University. Subsequently the title was borrowed by the faculty of theology, and first conferred by the University of Paris, on Peter Lombard. William Gordenis was the first person upon whom the title of Doctor of Medicine was bestowed; he received it from the College of Asti, in 1329.

The greatest nutmeg ever known met with a gr(e)ater.

A poetical Western editor says: "We are in receipt of two poems, one on the 'Throbbing Brain,' and the other on a 'Beating Heart.' We will wait until we receive one on the 'Stomach Ache,' and publish all three together."

A gum-chewing match was the chaste divertisement in a Vermont town, recently. It is said the winner can chew gum in seven different languages, with both eyes shut and one hand tied behind her back. Those Vermont girls are very well educated.

The California fairs are unique of their kind. At one in Tuolumne county several bottles of strained honey were put on exhibition, when a chap put a bottle of castor oil with the rest. Several old ladies sampled with the same result. The opinion of all who tried it was that the bee who laid it was a fraud.

A reporter of the *New York Times* lately visited several of the prominent physicians of that city to learn their experiences with hydrate of chloral. All testified that its use requires the utmost caution, and some are of an opinion that its employment is only justifiable in cases of *delirium tremens*.

The establishment of a College of Science in York is contemplated. It is estimated that a suitable building will cost £25,000, and that a like sum must be invested to support the different professorships. A subscription list has been opened, with the understanding that no money will be taken until £30,000 is promised. Sir William Fairbairn subscribes £1,000, provided the £30,000 is secured.

We are pleased to learn that J. Baker Edwards, a name at one time very prominent in England amongst pharmacutists, of the Pharmaceutical Society, has been appointed Professor of Chemistry and Microscopy in the Medical

Faculty of Bishop's College University at Montreal. The University has also conferred upon him the degree of D.C.L. *honoris causa*.

The *Scientific American* says the newest wonder at the West is a soda lake near Rawlins, on the Union Pacific Railroad, several miles in circumference, and capable of supplying 65,000 tons of soda a year. This genial body of water is fed from countless springs bubbling from a species of granite rocks, which includes in its composition a soda feldspar. [Whence did the *S. A.* ascertain the exact capacity of the supply? Ed. C. AND D.]

The peculiar action of the iodide of potassium in establishing a process of absorption of the animal fibre in the living system has been carefully investigated by Prof. Melseus, who publishes, in the *Bulletin de l'Académie Royale des Sciences, des Lettres, et des Beaux-Arts de Belgique*, the results of his inquiry. He appears to refer the phenomenon to a process of slow combustion by which organic matter is destroyed.

The *Dental Register*, in a recent number, states that the following, used as an occasional mouth-wash, will be found excellent:—Take chlorate of potash, three drachms, and dissolve in eight ounces of rose or other medicated water. As an article with which to flavour the breath, there is probably nothing equal to the wild ginger (*Asarum Canadensis*.) It is used by chewing a small portion of the root, or if in powder, it can be made into a lozenge. It imparts to the breath an agreeable, spicy aroma.

Chinese Vermillion is celebrated the "world over." They make it from fine cinnabar (sulphuret of mercury), which has been carefully sublimed, and is deposited in beautiful, bright, violet-red crystals. The crystals are powdered between two stones, being ground with very little water. The mass is then washed repeatedly with pure water. The purity of the water being thought of the first importance. No vermilion equals the tint of the Chinese. Immense quantities are used by the Chinese in making ink, painting on porcelain and wood, and colouring candles and paper. Everything lucky and pleasant among the Chinese must be red; hence, things connected with marriages and worship must be of this colour. It is put up in black papers. Large quantities are exported to Europe and this country, the prices depending on that of mercury, it being about twenty-five per cent. higher than mercury.

Although the sponge is in universal use, and has been for hundreds of years, yet, few, very few persons are aware of its origin,—that it is nothing more than the skeleton of an innumerable family of low forms of animalculæ. In order to prepare it for use, it is first left in the air for a short time, until the gelatinous part is decomposed; then the mass is washed in hot water and afterwards in a bath of dilute muriatic acid. The toilet sponges are bleached by means of chlorine and hyposulphite of soda. The so-called wax sponges that are used by doctors for dressing ulcers, are purified sponges dipped into fluid wax, and then pressed between hot plates. The French and Austrian Governments have lately commenced to rear sponges artificially—the former on the shores of the Mediterranean, the latter on the coast of Dalmatia. The cultivation is said to be perfectly successful, and to yield large profits.

A NOBLE REPLY.—It is related of Professor Agassiz, that an intimate friend once expressed his wonder that a man of such abilities as he possessed should remain contented with so moderate an income. He replied: "I have enough. I have not *time* to make money. Life is not sufficiently long to enable a man to get rich and do his duty to his fellow-men at the same time."

SOLVENT PROPERTIES OF ANHYDROUS LIQUID AMMONIA.—Professor Seely, writing to the *American Journal of Applied Chemistry*, claims to have made the discovery that anhydrous liquid ammonia has a solvent power upon certain metals, and he has actually succeeded in obtaining a solution of sodium in this liquid. The solution presents all the physical characteristics of a true solution. On evaporation the sodium is gradually restored to the metallic state in the same continuous manner in which the solution has been effected. The colour of the solution is a very intense blue.

CURIOUS PROPERTY OF TELLURIUM.—The *Pacific Medical and Surgical Journal* says the salts of tellurium have the property of imparting to the perspiration a most offensive odour. It is said that Dr. Bunsen, who experimented on his own person, was compelled to absent himself from society for four weeks on this account. It is surmised that tellurium will never be used extensively as a medicine.

AN ODD DEFINITION.—The proprietor of a little ale-house in Scotland having on his sign-board, after his name, the letters "M.D.F.R.S.," a Physician, who was a Fellow of the Royal Society, asked him how he presumed to affix these letters to his name. "Why, sir," said the innkeeper, "I have as good a right to use them as you have." "What do you mean, you impudent fellow?" replied the Physician. "I mean, sir, that I was Drum-Major of the Royal Scots Fusiliers."

LOGICAL.—To the question, "Why will not a pin stand upon its point?" an undergraduate at Cambridge is reported to have returned the following elaborate and conclusive answer:—1. A pin will not stand on its head, much less is it possible that it should stand on its point. 2. A point, according to Euclid, is that which has no parts and no magnitude. A pin cannot stand on that which has no parts and no magnitude, and therefore a pin cannot stand on its point. 3. It will if you stick it in.

NEW SOURCE FOR BENZOIC ACID.—The urine of horses and cattle is utilized in Northern Prussia for the manufacture of benzoic acid. One house at Königsberg supplies the market from this source. The establishment makes 7,700 lbs. of benzoic acid annually for which 3,850,000 lbs. of urine are required, not to speak of shiploads of fuel to evaporate it. Benzoic acid is now chiefly used in the manufacture of a red colour for woollen goods, and is also highly prized in making certain kinds of perfumery.

TO DISTINGUISH COAL TAR BENZOLE FROM THAT MADE FROM PETROLEUM.—Brandberg recommends a piece of pitch for this purpose. Pour the liquid to be examined on to a small piece of pitch in a test tube. Genuine benzole dissolves pitch in a few moments to a tarry liquid, while that made from petroleum, as well as petroleum ether and ligroin, is scarcely coloured by it, even after having been left in contact with it for several hours. The properties and uses of benzole vary considerably, according to its source, and the above test will therefore be found convenient.

OXYGEN IN PETROLEUM WELLS.—It is stated by M. Widemann, who is connected with the works of the New York Oxygen Gas Company, that the use of oxygen in renewing and increasing the flow of oil in petroleum wells has been so successful that a regular trade has sprung up in oxygen gas for this purpose. The gas is injected into the wells through tubes, and mingling with the hydrocarbon vapours forms an explosive mixture, which, when ignited, completely opens seams which have become clogged, and thus renews the flow.

SALT IN THE SEA.—A French chemist, M. Nadic, has, says the *Druggists' Circular*, been making a thorough examination of the salt water of different oceans, especially in reference to the amount of chloride of sodium contained in them. He obtained the following results:—The Mediterranean Sea contains of salt, 2.710 per cent; the Atlantic Ocean, 2.789 per cent.; the English Channel, 2.595 per cent.; the Pacific Ocean, 2.587 per cent.; the Lake Ormiah (Persia), 19.05 per cent. The specific gravity of the water was found to range from 1.029 to 1.030 per cent.

ACCIDENT STATISTICS.—An Englishman's risk of dying (says the *Engineer*) by strangulation is six times as great as of being killed on a railway, whether by his own carelessness or by an accident. If his own carelessness be excluded from the estimate, his risk of death by hanging is 130 times as great. Ninety-nine times as many people die of cancer in England as are killed on railways. Excluding, as before, the element of carelessness, 2,165 persons will die of cancer to one killed on a railway. In England, during five years, 333 accidents occurred—200 from collision, 77 from getting off the line, 36 from damage to machinery, and 20 from other causes. For fourteen years, from 1855 to 1869, one person was killed to 7,161,301 transported.

THE USE OF NAPHTHA AS FUEL.—The Odessa correspondent of the *Moscow News*, reports the success of an experiment recently made upon the Black Sea, for the purpose of testing the feasibility of substituting naphtha for coal as fuel on board the Russian steamers—a plan first conceived by a native engineer, named Poraiski. According to a report made upon the subject by this gentleman to the authorities, the consumption of naphtha is 35 per cent. less than that of coal; and he considers it possible, under favourable circumstances, to increase this to fifty per cent.—unquestionably a great economy.

PALMIGRENA.—A preparation just being introduced in the American market, and recommended to cure consumption in all its stages:—

Palmstarch	1 part
Sugar	9 "
Chestnutmeal	1 "
Burnt and Ground Coffee	$\frac{3}{4}$ "
Powdered Cacao	1 $\frac{1}{4}$ "
Ricemeal (flour)	1 "
Arrowroot	1 "

—*American Medical Gazette.*

AN AUSTRALIAN CRAZE.—The *Illustrated Sydney News* reports the arrest at Sydney of a young man named Otto Schwartz, who troubles the public with a singular fancy. He believes that he is dead, and has been so for twelve months. The cause of his death was, he understands, poison, and he has been round to all the doctors in the town in vain search for one who will perform a *post-mortem* examination upon him, and satisfy his curiosity as to the particular kind of poison it is that removed him from the land of the living. The charge laid against him by the police is that he is "liable to commit an indictable offence, to wit, suicide"—the very last thing one would suppose a dead man capable of.

THE TOLERANCE OF CHLOROFORM.—Dr. Edward R. Squibb, of Brooklyn, N. Y. (*New York Med. Journal*), remarks that the greatest consumption of chloroform he ever met with was in a patient of Dr. Gustave Morelli, of New York City. This patient was the widow of an Italian physician; her age 48, and her appearance healthy. She was subject to hereditary migratory gout, the sudden pain of which was so severe that she finally gave up all slower means of temporary alleviation for the prompt action of chloroform. Between the 31st of March and the 16th of December, 1865, a record was kept, and during this time, by Dr. Morelli's direction, she was supplied by Dr. Squibb with fifty-three pounds of purified chloroform. During acute attacks she not unfrequently used two pounds each day.

PHOTOGRAPHS ON IRON.—Not long since we (*The Ironmonger*, July 31st), reported the fact that iron sheets, thin as gossamer, had been made in Wales, but that marvellous feat of scientific skill and ingenuity has now a rival, to be found on the table of the photographer's studio, in the shape of iron *cartes de visite*. When at Wolverhampton we took the opportunity of inspecting some of these articles in a tent belonging to Mr. Frank Bocquet, of High-street, Wednesbury, pitched outside the ground, and as works of art they appeared perfect gems. These *cartes*, which are about the thickness of note paper, are made of very fine-grained plate, and coated with a sensitive enamel that has a surface equal to glass, upon which likenesses are developed with good effect. What the enamel is we can only guess, as it is an American invention, but we are inclined to think it is a preparation of *gutta-percha*.

PATENT MEDICINE VENDORS.—America seems to be the legitimate "hunting ground" for patent medicine vendors. This class comprises, however, very different persons, and between the patent medicine "dignitary" and the itinerant "doctor," who hawks his cure-all from door to door, there is a great social gulf fixed. From an American journal we learn that one of the last-named gentry recommended some of his "golden tincture" to a matron in Loyalstock, Lycoming county, as a sovereign cure for her ailing child. One dose of ten drops proved more than sufficient, and our American contemporary racily observes, "that it is to be hoped the child is now wearing a crown on the golden shore." It appears that the nostrum consisted entirely of chloroform and ether.

AND SO SAY ALL OF US.—A general practitioner writes to the *Lancet* recently on the subject of open surgeries as follows:—"You, in common with the majority of the profession, have been, and still are, endeavouring to raise the standard of medical education, and thus elevate the whole body in the estimation of the public. Now, the establishment of open surgeries with chemist's retail must tend in a contrary direction. It fosters the idea that the value of medical services is to be judged by the amount of medicine sent. It brings the profession thus represented to the level of the trade to which it is united. Surely something can be done by the qualifying bodies to prevent the increase of such anomalies. What is the meaning of the affirmation taken by every M.R.C.S. on receiving his diploma, 'that he will uphold the dignity of the college,' if no notice is taken of the undignified practice in question?"

LANGUAGE WAS GIVEN, ETC.—We clip the following from the Philadelphia *Sunday Dispatch*, Its perusal cannot fail to provoke a "molecular" smile, and to sharpen the "protoplasmic" appetite of our readers:—"Professor Poey, of Lycoming county, has been trying to tell us what 'life' is. According to Poey, 'Life results from a double molecular motion, general and continuous, of composition and of decomposition in relation to the organism and the inorganic medium. The medium is the combination of external agents, physical and chemical, proper to furnish to the organism the principles necessary for its nutrition and the manifestation of the properties of the anatomical elements.' Strange! how Error fastens itself in the human mind, and by its rank growth chokes the tender plant of Truth! During all the fourscore years of our existence we have cherished the fond delusion that Life was rather an immorigerous outgrowth of a retiary paradox, which engrafted upon the persiflage a mephitic diapason, causing it to permeate the neurosthenic rhomboid, and so producing isothermally protoplasmic vitality. That is what we thought Life was. But we see the mistake now, since Poey mentions it. It is hard, though—very, very hard—to see the idols of our youth thus thrown down and broken one after the other. And by a man named Poey, too. It will make our whole Christmas season sad."

INFORMATION WANTED.—We cut the following from the American *Druggists' Circular*, thinking our subscribers may aid Mr. Milbau:—"The present address of the following gentlemen, who are graduates of the New York College of Pharmacy, is desired. Any person who can furnish the information is respectfully requested to forward it to E. L. Milbau, 183, Broadway, New York, Secretary."

Arze, Frederick	... 1867	Hinsdale, Samuel, Jr.	1838
Ball, William	... 1860	Matras, John T.	... 1832
Buceta, Ramon	... 1865	Mietsch, Adolphus	... 1849
Calam, Henry	... 1841	Parsons, Henry L.	... 1846
Canavan, George	... 1860	Plessner, Paul	... 1868
Carr, John	... 1833	Pressinger, Augustine	1186
Carter, Charles	... 1858	Purdy, David M.	... 1839
Clark, Nathaniel	... 1840	Roberts, Joseph	... 1845
Coggeshall, Josias H.	1841	Roche, James	... 1854
Combs, Richard F.	... 1852	Sampson, Proctor C., Jr.	1851
Downing, Thomas K.	1837	Sanderson, Robert T.	1837
Everett, Horace	... 1837	Sing, John B.	... 1847
Fairebild, John	... 1841	Smith, James W.	... 1832
Garribrance, Thomas E.	1853	Smith, Robert B.	... 1747
Hallock, Allen C.	... 1837	Tittle, George A.	... 1846
Hallock, James C.	... 1934	Trenard, Julius	... 1855
Hamilton, George A.	1856	Wall, Charles E.	... 1854
Hilton, James	... 1837	Ward, Samuel	... 1842

CARBUNCLE.—Dr. P. C. Nott, of New York, writes to the *New York Medical Journal* that, having had his attention attracted by several articles in the medical journals, on the anæsthetic effects of carbolic acid when locally applied, tested the remedy in a case of carbuncle. All other remedies had proved unsatisfactory. An incision of about an inch and a quarter was made in the carbuncle and stuffed with cotton saturated with pure carbolic acid. The whole surface of the hardened mass was also painted with the acid. There was a sharp burning sensation for a few minutes, when the pain subsided completely, and the patient never complained of any afterwards. Every day for a week the doctor continued to insert the acid in the same way into the cut,

which sloughed all around to the depth of one-eighth of an inch. The surrounding inflammation and induration subsided rapidly, and in a week there was nothing left to treat but the small open wound made by the knife and acid. Three other small carbuncles commenced an inch or two from the large one; they were all treated by incision and acid, and they all aborted.

NAPHTHA.—The Commissioners of her Majesty's Inland Revenue, in their fourteenth report just published, state that the difference in price between methylated spirit and pure spirit of wine is so great, that it need occasion no surprise if a few instances are now and then discovered of the illegal substitution of the former for the latter. During the past year eight samples of medicines for internal use, examined under Excise supervision, were found to have been prepared from methylated spirit. They comprised sweet spirit of nitre, paregoric, and the tinctures of catechu, rhubarb, and cardamoms. Three samples sold as "Finish" have been found to consist of methylated spirit only. One of the samples was deeply coloured with aniline red dye, and had been illegally supplied in that state to a firm of colour-makers, who wished to use methylated spirit for the purposes of trade without being subjected to the ordinary regulations. The number of samples of wood spirit examined for methylating purposes has been 326—the largest number hitherto received in the course of one year. Two of the samples, upon examination, were found to contain an admixture of ethylic alcohol to the extent of 10 to 45 per cent. respectively. Both were from the same methylated spirit maker, against whom proceedings were taken, and the full penalty of the law recovered.

Such is the ease with which scientific intelligence is now propagated that the experiments of Dr. Fayer, in India, on snake-bites, have attracted attention in the *Panama Herald*. It is there stated that an efficacious native Indian remedy for snake-bites has long been employed in many parts of the interior, and more successfully than ammonia, codron, cuaco, and other substances. The composition referred to is made by adding to a bottle of alcohol, as strong as can be got, and of at least 35°, the contents of the gall-bladders of every poisonous snake that can be got at. The dose is a thimble-full internally and the like externally.

SULPHUR IN LOUISIANA.—Sulphur beds of great extent, remarkable purity, and apparently of immense value, were discovered accidentally, some three years ago, in the parish of Calcasieu, south-eastern corner of Louisiana, near the Calcasieu river, a navigable stream emptying into the lake of the same name, which communicates with the gulf; the mines are not far distant from the line of the Chattanooga railroad. The *Scientific American* says, "the discovery was made during the boring of a well for petroleum. Oil in paying quantities was not found, but something better in the shape of this sulphur bed. From a recent pamphlet issued by the American Sulphur Mining Company, of New Orleans, we gather the interesting particulars which follow. This company (having a capital stock of 600,000 dollar) and the Calcasieu Sulphur Mining Company are at work in the development of the sulphurous treasures, and the indications are that this country will ere long cease to be an importer and become an exporter of this valuable commodity. The Louisiana bed or layer of sulphur commences at a depth of 428 feet from the surface of the ground, and terminates at 540 feet, the bed having thus a thickness of 112 feet. The proportion of sulphur is sixty per cent. at the top of the bed, the proportion increasing rapidly as we descend, being ninety per cent. at a depth of 486 feet. The proportion then gradually diminishes. The sulphur appears in compact and amorphous masses, of a pale colour, interspersed here and there with yellow crystals. It is surrounded by a calcareous crystalline matrix, of whitish colour and rather considerable hardness, but which, nevertheless, is easily reduced to powder under the stroke of the hammer. The general analysis of the deposit yields seventy-seven per cent. of pure sulphur. As for the working of the sulphur bed itself, it will not present the slightest difficulty; for the rock, without being too hard to disintegrate, is yet sufficiently compact and resisting to sustain, without any wooden scaffolding or coating, all the galleries to be constructed.

Exchange Column.

REVISED TERMS.—Announcements are inserted in this column at the rate of one halfpenny per word, on condition that name and address are added. Name and address to be paid for. Price in figures counts as one word.

If name and address are not included, one penny per word must be paid. A number will then be attached to the advertisement by the publisher of the CHEMIST AND DRUGGIST, and all correspondence relating to it must be addressed to "The Publisher of the CHEMIST AND DRUGGIST, Colonial Buildings, Cannon-street, London, E.C.," the envelope to be endorsed also with the number. The publisher will transmit the correspondence to the advertiser, and with that his share in the transaction will cease.

FOR DISPOSAL.

- Quantity Goulding's Plant Food. Offers. 41/415.
- 22 in. Show Jar, "Royal Arms," 4 Carboys, cost 90/; half-price. 22/415.
- Fly-papers, a few thousand at 8/6 per 1,000, carriage paid on receipt of stamps. 36/415.
- Elegant Show Jar and Cover 26-in. high, Royal Arms, quite new. T. Guy, James-street, York.
- Six gallons Benzole; 4 lb. Gallic Acid; 4 lb. Ext. Belladonna; offers wanted. Address, Shelley, Bilston.
- Sago.—Large quantity slightly damaged. W. T. Jackson, druggist, Stalybridge.
- Analytical Scales and Weights, by Ortling, cost over £20. What offers in Patents, Drugs, cash, &c. 7/415.
- Wanted an offer for 500 dozen Vegetable Flesh Rubbers or Loofers (or for less number). Apply to G. Dowman, Chemist, Southampton.
- Bushby's Patent Rotary Pill Machine, nearly new; original price £10 10/ nett; take £5 5/. F. Blunden, chemist, Basingstoke.
- Glass Case, with slanting show-case at top, 6 feet long, 3½ feet high, 2 feet wide. Hewitt's Triturating Machine. J. Tirrell, Hanley.
- Irish Moss in bales, 1½ to 2 cwt., new, excellent quality, 14/ per cwt., cash here. Charles M. Hallam, 20, High-street, Burton-on-Trent.
- York Glass made Specie Jar, about 30-inch scroll, Rhubarb, gilt glass top, good as new, 30/; or will swap for a good case. W. Farrar, West Hartlepool.
- "Cabinet of Materia Medica," Evans, Lescher, and Co.; perfect, 10/. The Formula of a very valuable Cholera and Diarrhoea Mixture, 2/6; really efficacious. 18/415.
- Pereira's "Materia Medica," latest edition; has scarcely been used; will be sold cheap. Offers solicited. John Gillard Paige, Southmolton.
- Pereira's "Selecta," good condition, 11th edition, 2/3; 1 oz., best Mitcham Oil Peppermint in stoppered bottle, 2/6. 50/415.
- Smethurst's Patent Measuring Funnels, quite new, Tin Quarts, 1/6 each free in Manchester, 1 doz. free in London, or offers. J. T. Jackson, Oldham.
- Beach's Food, 13 shilling packets. Harding's Food, 22 shilling packets, 53 sixpenny do., at 6/, and 3/ per doz. if all taken, or offers. 34/415.
- "Pharmaceutical Journal" and "Chemist and Druggist" from commencement, complete, bound in dark cloth. A Chubbs' Patent Detector Lock, 8 by 6, for warehouse or cellar door. B. Peppercorn, Lincoln.
- Ten Air Cushions and Pillows, various shapes and sizes, cost over £2; the lot for 10/. 18 Chest Protectors, cost 16/, slightly soiled; lot for 8/. Garsido, chemist, Southport.
- One Case Surgical and Cupping Instruments, with Splints, £5; also a second-hand Mahogany Medicine Chest, 1 ft. high, length, 19½ in. by 12 in., 45/. Apply F. J. Stannard, Broad Green, Croydon.

Glycerine Sheep Dip. Four 5 lb. jars; two 10 lb., one 20 lb., and one 30 lb. tins, together or separate. Cash offers requested. J. W. Savill, medicine vendor, Dunmow, Essex.

Two ten-gallon Carboys with Cut Stoppers, and 2½ in. turned Mahogany Blocks complete; also about 3 doz. 2 gallon Store Tincture Bottles, with Capsules and Bungs, and Gold Labels, in good preservation. 32/415.

Owen's "Compendium," Receipts and Processes, Pharmacy, Chemistry, Confectionery, Perfumery, Cosmetics, Homœopathy, Essences, Wines, latest Discoveries and Improvements. New impression, 26 stamps, "invaluable." Owen, chemist, Leytonstone.

Glass Cases for sale, all in mahogany, 50 in. long, 26 in. high, glazed in three pieces, modern, 40/; 46 in. long, 43 in. high, 42/; Best Plate Front, 54 in. long, 9 in. wide, 6 in. high, two Fall Doors at back, 32/6. Apply to J. Floyd, druggists' valuer, Bury St. Edmunds.

One 10/6 Atkinson's "Indian Restorative," for half dozen Cockle's Pills, or 5/. Parnell's "Chemical Analysis, Qualitative and Quantitative," cost 9/, for 4/6. Kirkc's "Physiology," 12/6, for 5/. Wilson's "Anatomy," 12/6, for 2/6. Entwisle, Chapel Allerton, Leeds.

Ross's Carte Lens, Camera, and Stand, £3 5/. 1½ Gall. Tin Still, and Liebig's Condenser, 15/. Small Pneumatic Trough, 1000 cent. Cube Gas Jar, Hemmings's Jet, 8 Stopcocks and Connectors, for 10/. R. S., Post-office, Whitstable, Kent.

Maw's Mirror Backed Show Stand, 30/, as Fig. 19 altered; Maw's Electro-Magnetic Machine, Double Magnets, 25/; Pair Show Globes, 15/; Counter Scales, 2/6; Gas Stove, 5/; Lot of 6d. Violet Ink, 3/ doz.; very large Pepy's Gas Holder and Retort, suitable for dentist or laboratory, 40/. Y. Z., Stamp Office, Bourn.

Surplus books cheap. Muspratt's "Chemistry," 40/. Ure's "Dictionary Chemistry," 7/6. Cooper's "Surgical Dictionary," 7/6. Fowne's "Manual," 5/6. Bateman's "Skin Diseases," 2/6. Turner's "Chemistry," 3/6. Elliotson's "Physiology," 7/6. Hooper's "Medical Dictionary," 2/. Y.Z., Stamp Office, Bourn.

"Pharmaceutical Latin Grammar," 5/, for 3/6. Hamilton's "Cæsar's Commentaries," Latin—English, interlined, 7/6, for 5/6; do., do., Latin only, 1/, for 8d. "English Composition," 1/6, for 10d. Buckmaster's "Chemistry," 2/6, for 1/6, all equal to new. J. Jupp, chemist, East Grinstead.

1 lb. 14 oz. Plastic Collodion in Stpd. bottle. 1 gall. Tin Still with condenser, suitable for gas furnace; never used. Mahogany stand for window, 8 feet long, three rows shelves in three pieces, cost £2 10/. Offers wanted. Apply, John Tankard, 292, Manchester-road, Bradford, Yorkshire.

Paris' "Pharmacologia." Hunt on Tic Doloureux, etc. Millingen's "Medical Curiosities," 2 vols. Grainger on the Spinal Cord. Mayo on Digestion. Rowland on Neuralgia. Birkenhout's "Pharmacopœia Medici." Culpepper's "English Herbal." Open to offers. B. A. Atwell, Wincanton, The Dispensary.

Lescher's "Guide to the Minor and Major Examinations," 5/. Lescher's "Guido to the Modified," 2/. Morriss's "New Directory of Devonshire," with coloured map, 12/, cost 25/. Southall's "Cabinet of Materia Medica," 12/, cost 30/. Redwood's "Supplement to the Pharmacopœia, third edition, 10/, cost 22/. A. Smith, High-street, Crediton, Devon.

Ten 6 lb. Opaque White Glass Ointment Pots, gold labels complete, quite perfect; 2 Bufton's Ink; 3 Freeman's Senna; 2 Freeman's Tolu; 2 Fardon's Embrocation; 3 Hempstead's Scaweed; 2 Holloway's Ointment, 2/9; 6 Jenkins's Salve; 3 Woolley's Candy; 1 Beatson's Oil; T Gas Burner and Sundry Fittings. Offers wanted. Day, chemist, Beckenham.

Four Johnson's Sarsa and Bark, 3 Locoek's Aperient, 9 Prichard's Steel, 2 Woodcock's Cough, and 13 Simpson's Antibilious Pills; 10 Henry's Nervine, 2 Bunter's Balm, 24 Dean's Salve, 7 Beaton's Ringworm do., 4 Worsdell's Carminative, 3 Berry's Neuralgic, 3 Lyman's Antiscorbutic Drops, 24 Boulte's Embrocation; half selling price for cash. 37/415.

Show-case for Counter, mahogany, glass top, lined, lock and key, 32 in. by 14 by 4, nearly new, a bargain. Water Filter, Lipscombe's, holds two gallons, nearly new. Heavy Scales, with weights up to 28 lbs. square shape, nearly new; sold cheap. Fourteen pairs Forceps, Gum Lancet, Leather Case, set complete. P.B., 1867 edition, clean and good condition, 4/. Silverlock's "Sale of Poisons Register," one leaf filled, 1/6. First ten parts Muspratt's "Chemistry," uncut, 4/. Chemicus, 49, Chestnut-street, Leicester.

WANTED.

A small Soda Water Machine. A. B. Post-office, York.

Some good English Beeswax; state price. 31/415.

Glass Case about 6 ft. long and 3 ft. high. Send particulars to J. Floyd, Bury St. Edmunds.

"Homœopathic Pharmacopœia" and "Homœopathic Veterinary Pharmacy." 5/415.

Bentley's "Botany," second edition; state price and condition. "Alpha," Codnor, Alfreton.

Harris's or Tome's "Dental Surgery," latest editions. State price and condition. G. W. Pratt, dentist, Manchester.

Late editions of U. S. Dispensatory, and Griffiths' "Formulary." Price. 14/415.

One Forty-gallon Oil Cistern, with tap and cover, for Paraffin. Send price to H. Wellington, Freshwater, Isle of Wight.

The Engraving representing Tooth-ache (real and imaginary) supposed to be illustrations by Cruikshank. 2/415.

Small Platform Weighing Machine; "Selecta Præscriptis," Atfield's "Chemistry;" Bentley's "Botany;" Lescher's "Guide to the Examinations;" latest editions; state particulars. Thresh, Dukinfield, Cheshire.

Royle's "Materia Medica;" Atfield's "Chemistry," and a work on Practical Pharmacy, or any other useful work for the Examination. H. E. Dyer, St. Mary's-street, Wallingford, Berks.



[The following list has been compiled expressly for the CHEMIST AND DRUGGIST, by L. de Fontainemoreau, Patent Agent, 4, South-street, Finchbury, London; 10, Rue de la Fidélité, Paris; and 33, Rue des Minimes, Brussels.]

Provisional Protection for six months has been granted for the following:—

- 1147. B. Tanner, of New Brighton, Cheshire. Improvements in the manufacture of superphosphate of lime. Dated 28th April, 1871.
- 1310. W. S. Laycock, of Sheffield. Improved apparatus for pressing oil from linseed and other seeds. Dated 15th May, 1871.
- 1406. R. Dawlings, of Great Winchester-street. An improved process of decolorizing syrups, juices, liquors, oils, and other liquids, also gases, by the use of carbonized iron ore or carbonate of iron. Dated 25th May, 1871.
- 1416. B. E. K. Newlands, of Charlton, Kent. Improvements in the production of alum from natural phosphates of alumina. Dated 26th May, 1871.
- 1457. The Honourable J. T. Fitz-Maurice, of Charlestown, Cornwall. Improvements in adjustable tables for the use of invalids and others. Dated 1st June, 1871.
- 1467. P. Rumine, of St. Petersburg, Russia. An improved treatment of wines and other alcoholic liquors for ageing or improving the same. Dated 2nd June, 1871.

- 1487. J. W. Burton, of Leeds. Improvements in treating and refining oils and fats for lubricating and other purposes. Dated 5th June, 1871.
- 1489. B. Tanner, of New Brighton, Chester. Improvements in the manufacture of phosphates of soda and other alkaline bases. Dated 5th June, 1871.
- 1498. J. Stephens, of Duke-street, Grosvenor-square. Improved means of, and apparatus for, ventilating hospitals and other buildings and places, and for driving machinery in general. Dated 5th June, 1871.
- 1518. H. Larkin, of Theydon Gernon, Essex; A. Leighton, of Liverpool; and W. White, of Hampstead. Improvements in the production of iron and steel and of oxide of iron. Dated 5th June, 1871.
- 1531. C. Crockford, of Holywell, Flint. Improvements in the production of the alkalies and their salts. Dated 9th June, 1871.
- 1535. W. A. Lyttle, of The Grove, Hammersmith. Improvements in voltaic batteries. Dated 10th June, 1871.
- 1539. R. O'pherts, of Ardee, Louth, Ireland. Improvements in presses for pressing indigo or other substances, and improved cutting devices to be used in connection therewith. Dated 10th June, 1871.
- 1579. G. E. Marchisio, of Baker-street, Portman-square. Improvements in extracting olive oil, and in the machinery or apparatus to be employed therein. Dated 14th June, 1871.
- 1638. D. Spronl, of Glasgow. Improvements in the construction of caps for invalids or patients. Dated 22nd June, 1871.
- 1642. E. Konigs, of Westhöfen, Westphalia, and J. Henderson, of Glasgow. Improvements in obtaining sulphate of soda, hydrochloric acid, chlorine, and other products. Dated 22nd June, 1871.
- 1648. H. Highton, of Putney. Improvements in galvanic batteries. Dated 22nd June, 1871.
- 1669. W. Bentley, of Birmingham. A new or improved instrument for administering medicine balls to horses and other animals. Dated 26th June, 1871.
- 1674. G. Glover, of Manning-street, St. Marylebone. Improvements in the construction of invalid bedsteads. Dated 26th June, 1871.
- 1675. G. Gwynne, of Marylebone-road. Improvements in treating fatty, oily, waxy, and hydrocarbon bodies. Dated 26th June, 1871.
- 1682. H. Deacon, of Appleton House, near Warrington, Lancashire. Improvements in certain apparatus for the manufacture of chlorine and sulphuric acid. Dated 27th June, 1871.
- 1733. T. Hargreaves, of Appleton-within-Widnes, and T. Robinson, of Widnes, Lancashire. Improvements in the manufacture of sulphates and in apparatus employed therein. Dated 4th July, 1871.
- 1776. B. Tanner, of New Brighton, Chester. Improvements in the manufacture of superphosphate of lime so as to control its soluble condition. Dated 7th July, 1871.
- 1851. J. T. Way, of Kensington. Improvements in the manufacture of soluble phosphate of lime. Dated 14th July, 1871.

Letters Patent have been issued for the following:—

- 3367. J. Gamgee, of Great Winchester-street, and W. H. Maitland, of Thurloe-square. Improvements in medicating cotton and other fibres for sanitary and surgical purposes, and in machinery employed therein. Dated 24th December, 1870.
- 46. W. H. Furlonge, of Hammersmith, and J. D. Churchill, of Holloway. Improvements in furnaces or apparatus for the manufacture of alkalies, and for other purposes. Dated 9th January, 1871.
- 79. H. Kenyon, of Manchester, and I. Swindells, of Warrington, Lancashire. Improvements in the production of sulphureous, sulphuric, and hydrochloric acids, and products arising therefrom, such as the sulphates of soda, magnesia, potash and alumina, alum, oxide of alumina, the chlorides of potassium and sodium, phosphate and phosphite of lime, and ochre. Dated 12th January, 1871.
- 167. B. J. Bing, of Finsbury-place South. Improved means for securing artificial teeth in the mouth. Dated 23rd January, 1871.
- 191. M. Chapman, of Charterhouse-buildings, Goswell-road. Improvements in cases or cabinets for liqueur bottles and glasses. Dated 25th January, 1871.
- 861. W. C. Westerton, of Kensington. An improved zymotic disinfecting fluid. Dated 31st March, 1871.
- 1036. D. Spence, of Manchester. Improvements in the treatment of spent oxide of iron, arising from the purification of gas or the said oxide when partly spent. Dated 19th April, 1871.
- 1232. W. Garton, of Southampton. Improvements in the manufacture of the saccharine material known as brewing saccharum. Dated 6th May, 1871.
- 1365. W. R. Lake, of London. An improved process and apparatus for manufacturing nitro-glycerine. Dated 20th May, 1871.

Specifications published during the month. Postage 1d. each extra:—

1870.

- 2934. A. M. Clark. Lozenges and crackers. 8d.
- 2975. A. F. de Hemptine. Concentrating sulphuric acid. 1s.
- 3014. C. F. Bower. Apparatus for the use of invalids. 4d.
- 3020. J. Galletly and another. Treating hydrocarbons. 8d.
- 3027. R. P. Wilson. Testing oils. 8d.
- 3042. A. C. Tupper. Manufacture of lint. 4d.
- 3045. J. Hargreaves and another. Manufacture of sulphates of soda and potassa. 4d.
- 3056. A. H. Watkins. Respirators. 4d.
- 3070. H. Codd. Bottles and stoppers. 4d.
- 3074. W. L. Joy. Charging oil seed presses. 4d.
- 3093. H. Larkin and another. Manufacture of chlorine. 4d.
- 3098. S. Desborough. Soap. 4d.
- 3105. W. G. Gard. Mixture for preserving meat, etc. 4d.
- 3208. P. Spence. Manufacture of prussiate of potash and Prussian blue. 4d.
- 3213. H. Hammond. Mixing soils, chemical manures, etc. 10d.
- 3250. J. C. Mowburn. Treating lichens or moss to obtain sugar, etc. 4d.

3253. J. H. Johnson. Preserving meat, etc. 4d.
 3261. J. J. Coleman. Treating lubricating oils and paraffin. 4d.
 3262. A. Ford. Fomenting pad or poultice. 4d.
 3274. W. Boggett. Treating garancine, etc. 4d.
 3307. G. E. Marchisio and others. Extracting oil from olives, etc. 4d.
 3321. L. Mariotti. Preserving meat and fish. 4d.

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239. G. H. Funck. Vessels for containing volatile oils, spirits, etc. 8d.
 720. C. Wigg. Manufacture of alkali. 1s. 2d.
 956. B. J. B. Mills. Preparing juices of meat or other food. 4d.
 1025. W. R. Lake. Plate or base for artificial teeth. 4d.



A GAIN we are enabled to commence our Trade Report with striking evidences of commercial prosperity. The Board of Trade Returns for the past month show that the declared value of our exportations has been £19,817,990, the largest total ever attained, and more than 13 per cent. in excess of that of the corresponding month of each of the past two years.

The total declared value of our exports during the first seven months of the present year has been £121,455,961, showing an increase of more than 6 per cent. on the total of the corresponding seven months of 1870, and of more than 11½ per cent. on that of the same period of 1869. These facts speak for themselves, and certainly seem to indicate anything but that decline of British commerce and enterprise which some would have us believe is eternally threatening. Facts are stubborn things, and the time-honoured fiction of Britain's decline is pretty well worn, and might with advantage be abandoned to those prophetic spirits who continually discern the dread apparition of Macaulay's New Zealander on the ruins of London-bridge. There have been but few important alterations in the drug market since we last reported.

SOOTRINE ALOES are scarce, and this also applies to East Indian. Barbadoes go off freely, and at auction of 169 packages, 157 sold. **BALSAMS**: Canada is very scarce; the demand for Copaiba continues; Peru is not looked after, 9 cases having been bought in at 9s. 6d. Tolu remains unchanged. **CAMPHOR**, after having been in great request, chiefly for export, is now somewhat quieter, but the price is well maintained at 1s. 3d. for English refined.

COCHINEAL: 1,284 bags were offered at auction on the 9th, and an active demand prevailed. Silver of all kinds brought an advance of ½d. per lb., and black realized 1d. advance on former rates. **CANTARIDES** continue scarce and dear, and the new crop is reported to have suffered much from bad weather, the present price is 4s. 8d. with no prospect of immediate decline. **BARKS**: In auction, of 216 serons yellow Cinchonas only 40 sold, fine 3s. 4d., middling 2s. 9d., the remainder bought in. The supply of Crown and Grey is limited, and high prices rule. **CASCARILLA** is obtainable at former price, but **CINNAMON** may shortly be dearer, as we hear that the Ceylon market is well supplied with American orders, and good assortments are firmly held at 2s. 4d. per lb. with prospect of advance.

Gums are not very brisk. Arabics, however, have commanded more attention, and of 94 packages East India offered for sale, 72 found purchasers, yellow and reddish sorts 62s. 6d. to 61s., pea size 47s. 6d., pickings 20s. 25 cases picked Turkey, second to first sold at prices ranging from £7 15s. to £10. Australian realized from 25s. to 35s. per cwt. according to quality. **ESSENTIAL OIL**: Lemon of superior quality is still dearer, Aniseed has lately moved up from 8s. 9d. to 9s. 3d. per lb., and Cinnamon is very scarce. These are the only important changes we have to report.

ORUM has been the subject of very contradictory reports during the last month. The new crop we reported in our last to be very large; holders, for obvious reasons, circulate rumours to the contrary. A state of uncertainty therefore prevails in the market, and buyers are cautious. Private information reaches us that large parcels are expected almost directly, and a drop seems imminent, although future prices

depend greatly on the demand for America. At present there is not much doing, and prices range from 17s. 6d. for ordinary, to 22s. for fine soft, suitable for export.

GINGER has met with a ready sale, and **NUTMEGS** and **MAZE** maintain an upward tendency. Large sales of **PEPPER** have been made afloat and on the spot, and prices have recovered from a slight decline, and are now equal to the highest point. The market is not well supplied with **JAMAICA SASSAPARILLA**, and **ORONIS ROOT** is also scarce.

The trade in **CHEMICALS** has been brisk, and good export business has been done. Speculators have been operating for autumn shipments, and it is expected that good shipping orders will come in from the United States and Canada, although at present the reports of sales in the States are not very encouraging. Cream of Tartar is firm, at former rates, Tartaric Acid has maintained its value, Citric is rather easier, and Oxalic scarce and firm, at 10d. per lb. Bleaching Powder continues to fetch high prices; the demand for autumn orders is excellent, and no easier terms can be looked for at present. Large arrivals of Nitrate of Soda at Liverpool, caused a temporary flatness which has been recovered from, and prices are now firm. Sulphate of Ammonia is quiet and must come down shortly, the foreign demand being almost covered, holders cannot continue to realise present high prices. Bichromate and Prussiate of Potash are so much wanted as to cause makers trouble. If the demand and high prices continue, supplies will probably arrive from foreign sources. Iodine continues very scarce and dear, quotations being merely nominal. France has furnished us with some large Benzole orders and Carbolic Acid has been in great request for sanitary purposes, but no advance in price is reported. Bismuth preparations, after having ruled high for some time, appear likely to see easier terms, as Bismuth ore is being found in Australia containing as much as 7 per cent. easily and cheaply obtained.

DRYSALTERIES.—Shellac has been in unusually active demand, and a general advance in price is the result. Orange descriptions are worth 2s. 6d. per cwt. more, and for button sorts 5s. to 10s. advance is reported. Safflower is firm, and likely to be dearer, as Calcutta reports say the supply is short, giving rise to much competition and making dealers firm in their demands. In Cutch, Galls, and Gambier no business of importance has been done.

OILS.—**LINSEED** has been tolerably firm at from £32 5s. up to £32 15s. on the spot, closing at £32 10s. buyers and at £32 for September-December delivery. At Hull a quiet market has prevailed. During the last month English brown **RAPE** exhibited some flatness, falling to £40 10s., but since then it has recovered, and is now worth £41 to £41 5s. Refined £43 to £43 5s., Foreign £46 to £47. **COTTON** has well maintained former prices, and good business has been done, Crude at £29, Refined £34 to £35 10s. **OLIVE** has attracted much attention: Mogadore may be quoted at £48, Tunis and Levant £49, Gallipoli up to £51 to £52. 84 casks from Malaga, offered in auction, were bought in at £51. The season of the year is somewhat against **COCOANUT**, and the only important transaction we have to report is the sale of over 100 tons Ceylon, June shipment, at £39. The market for **PALM** has been steady with a moderate demand, fine Lagos at £37, but none has been offered by auction. In **FISH OILS** little business has been done privately; some small sales of first quality **WHALE** have been made at £33 10s., and of **COD** at £34 10s. 140 tuns Hudson's Bay Company's oil sold on the 9th at £29 10s. to £30 for brown to straw, and at £30 to £30 5s. for fine straw. At late public sales 5 tuns Colonial **SPERM** chiefly sold at £81, rather inferior £80; 101 tuns **WHALE** bought in, double compass £33, inferior £30 to £31, 30 tuns pale **SEAL** also bought in at £33; 24 tuns coloured, tinged £32 10s., fine straw £32; 18 tuns **SHARK** £32; 30 tuns **COD** £35, rejected £27, and 7 hogsheads **FISH** £31; 663 hogsheads East India **FISH** were withdrawn or bought in at £30.

PETROLEUM does not recover, and buyers hold off, as much uncertainty exists as to the operations of the Petroleum Bill now before Parliament. The stock is 33,555 barrels, and the deliveries last week were 827 barrels against 25,699 and 1,397 respectively same time last year.

SPIRITS OF TURPENTINE.—Since our last report, the *Cleo* has arrived from Wilmington with 1,507 barrels. This has caused American to decline to 38s. for present delivery. The market is void of French.

Monthly Price Current.

The prices quoted in the following list are those actually obtained in Mining-lane for articles sold in bulk. Our Retail Subscribers must not expect to purchase at these market prices, but they may draw from them useful conclusions respecting the prices at which articles are offered by the Wholesale Firms.]

CHEMICALS.	1871.		1870.	
	s. d.	s. d.	s. d.	s. d.
ACIDS—				
Acetic	0 4 to	0 0	0 4 to	0 0
Citric	2 10 ..	0 0	2 5½ ..	2 6
Hydrochlor.	4 0 ..	7 0	4 0 ..	7 0
Nitric	0 5 ..	0 5½	0 5 ..	0 5½
Oxalic	0 11 ..	0 0	0 8 ..	0 0
Sulphuric	0 0¾ ..	0 1	0 0¾ ..	0 1
Tartaric crystal ..	1 3½ ..	0 0	1 3½ ..	0 0
powdered ..	1 3½ ..	1 3½	1 3½ ..	0 0
ANTIMONY ore.....	240 0 ..	260 0	360 0 ..	420 0
crude	36 0 ..	38 0	40 0 ..	0 0
regulus ..	46 0 ..	47 0	75 0 ..	0 0
star	48 0 ..	49 0	75 0 ..	0 0
ARSENIC, lump.....	15 6 ..	16 0	16 0 ..	16 6
powder.....	6 9 ..	7 3	7 3 ..	7 6
BRIMSTONE, rough .	160 0 ..	0 0	160 0 ..	0 0
roll	10 0 ..	10 3	11 0 ..	0 0
flour.....	12 0 ..	13 0	12 0 ..	13 0
IODINE, dry	1 6 ..	0 0	0 9 ..	0 9½
IVORY BLACK, dry..	0 0 ..	0 0	0 0 ..	0 0
MAGNESIA, calcined .	1 2 ..	0 0	1 2 ..	0 0
MERCURY.....	180 0 ..	0 0	157 0 ..	0 0
MINIUM, red	20 6 ..	21 0	20 6 ..	21 0
orange	31 6 ..	32 0	31 6 ..	32 6
PRECIPITATE, red ..	3 2 ..	0 0	2 9 ..	0 0
white	3 1 ..	0 0	2 8 ..	0 0
PRUSSIAN BLUE	0 0 ..	0 0	0 0 ..	0 0
SALTS—				
Alum	135 0 ..	140 0	145 0 ..	150 0
powder	145 0 ..	150 0	160 0 ..	165 0
Ammonia :				
Carbonate	0 6½ ..	0 6½	0 5¾ ..	0 6
Hydrochlorate, crude,				
white.....	460 0 ..	560 0	480 0 ..	560 0
British (see Sal Ammoniac)				
Sulphate	400 0 ..	420 0	325 0 ..	330 0
Argol, Cape	60 0 ..	90 0	50 0 ..	67 6
France	0 0 ..	0 0	40 0 ..	50 0
Oporto, red	22 0 ..	24 0	22 0 ..	24 0
Sicily	0 0 ..	0 0	32 0 ..	40 0
Naples, white ..	0 0 ..	0 0	0 0 ..	0 0
Florence, white ..	0 0 ..	0 0	0 0 ..	0 0
" red	0 0 ..	0 0	0 0 ..	0 0
Ashes (see Potash and Soda)				
Blacbing powd.	13 7 ..	14 0	8 6 ..	9 0
Borax, crude	25 0 ..	40 0	25 0 ..	35 0
(Tincal)	45 0 ..	60 0	45 0 ..	60 0
British refnd. ..	80 0 ..	0 0	68 0 ..	70 0
Calomel	3 0 ..	0 0	2 8 ..	0 0
Copper :				
Sulphate	24 6 ..	25 0	23 0 ..	24 0
Copperas, green . .	50 0 ..	60 0	50 0 ..	60 0
Corrosive Sulphimate .	2 4 ..	0 0	2 1 ..	0 0
Cr. Tartar, French, p. cwt.	93 6 ..	95 0	88 0 ..	90 0
Venetian grey ..	95 0 ..	0 0	90 0 ..	96 0
brown	77 6 ..	85 0	0 0 ..	0 0
Epsom Salts	6 0 ..	7 0	6 0 ..	7 0
Glauber Salts	4 6 ..	6 0	4 6 ..	6 0
Lime :				
Acetate, white, per cwt.	12 6 ..	23	12 6 ..	23 0
Magnesia : Carbonate ..	42 6 ..	0 0	42 6 ..	0 0
Potash :				
Bichromate	0 9 ..	0 0	0 5 ..	0 5½
Carbonate :				
Potashes, Canada, 1st				
sort	36 0 ..	0 0	38 0 ..	0 0
Pearlashes, Canada, 1st				
sort	48 0 ..	0 0	48 0 ..	0 0
Chlorate	1 5 ..	1 5½	0 10 ..	0 11
Prussiate	1 6 ..	1 0	0 0 ..	0 0
red	2 3½ ..	2 6	1 9½ ..	1 10
Tartrate (see Argol and Cream of Tartar)				
Potassium :				
Chlorido	10 6 ..	11 0	14 0 ..	0 0
Iodide	22 0 ..	0 0	12 0 ..	0 0
Quinino :				
Sulphate, British, in				
bottles	7 2 ..	0 0	6 6 ..	0 0
Sulphate, French ..	6 10 ..	0 0	6 1 ..	0 0
Sal Acetos	1 1½ ..	0 0	0 10 ..	0 0
Sal Ammoniac, Brit. cwt.	41 0 ..	42 0	41 0 ..	42 0
Saltpetre :				
Bengal, 6 per cent or				
under	29 0 ..	29 6	31 6 ..	33 0
Bengal, over 6 per cent.				
per cwt.	27 0 ..	28 6	30 0 ..	31 0
Madras	0 0 ..	0 0	0 0 ..	0 0
Bomb & Kurracbee p. ct.	0 0 ..	0 0	0 0 ..	0 0
European	0 0 ..	0 0	0 0 ..	0 0
British, refined ..	32 6 ..	32 6	35 6 ..	36 0
Soda : Bicarbonate, p. cwt.	14 0 ..	0 0	10 0 ..	0 0
Carbonate :				
Soda Ash	0 2½ ..	0 2½	0 1½ ..	0 2
Soda Crystals per ton	115 0 ..	117 6	72 6 ..	75 0
Hypo-sulphite	16 0 ..	0 0	18 0 ..	0 0

Soda :	1871.		1870.	
	s. d.	s. d.	s. d.	s. d.
Nitrate	15 3 to	15 6	15 6 to	15 9
SUGAR OF LEAD, White, cwt.	39 0 ..	40 0	39 0 ..	40 0
Brown	26 0 ..	28 0	26 0 ..	28 0
SULPHUR (see Brimstone)				
VERDIGRIS	1 0 ..	1 2	1 0 ..	1 2
VERMILION, English..per lb.	3 4 ..	0 0	2 7 ..	2 9
China.....	3 4 ..	0 0	3 0 ..	3 1

DRUGS.		1871.		1870.	
	s. d.	s. d.	s. d.	s. d.	s. d.
ALOEES, Hepatic....	70 0 ..	220 0	60 0 ..	160 0	
Socotrine ..	120 0 ..	280 0	100 0 ..	220 0	
Cape, good..	27 0 ..	29 0	26 0 ..	28 0	
Inferior	20 0 ..	25 0	17 0 ..	25 0	
Barbadoes ..	70 0 ..	210 0	80 0 ..	220 0	
AMBERGRIS, grey.....	25 0 ..	30 0	25 0 ..	30	
BALSAMS—					
Canada	0 10 ..	0 11	1 0 ..	0 0	
Cativi	1 9 ..	1 10	1 9 ..	1 10	
Peru	9 3 ..	8 6	9 9 ..	10 0	
Tolu	1 9 ..	1 11	2 3 ..	2 6	
BARKS—					
Canella alba	15 0 ..	25 0	19 0 ..	32 0	
Cascarilla.....	20 0 ..	37 0	22 0 ..	34 0	
Peru, crown & grey per lb.	1 3 ..	2 10	0 10 ..	2 4	
Calisaya, flat ..	3 2 ..	3 4	3 4 ..	3 6	
quill	3 2 ..	3 4	3 4 ..	3 7	
Cartbagena ..	0 10 ..	1 8	1 0 ..	1 9	
Pitayo	0 10 ..	1 6	0 10 ..	1 6	
Red	2 0 ..	7 3	1 6 ..	5 6	
Bucho Leaves	0 4 ..	1 0	0 3 ..	0 6	
CAMPHOR, China.. per cwt.	70 0 ..	72 6	76 0 ..	79 0	
Japan	77 6 ..	89 0	81 6 ..	82 6	
Refin Eng. per lb.	1 3 ..	0 0	1 2½ ..	0 0	
CANTHARIDES	4 8 ..	0 0	3 0 ..	0 0	
CHAMOMILE FLOWERS p. cwt.	40 0 ..	60 0	40 0 ..	72 6	
CASTOREUM	3 0 ..	30 0	3 0 ..	30 0	
DRAGON'S BLOOD, l. p. cwt.	100 0 ..	210 0	90 0 ..	200 0	
FRUITS AND SEEDS (see also Seeds and Spices)					
Anise, China Star pr cwt.	125 0 ..	0 0	110 0 ..	115 0	
German, &c. ..	41 0 ..	47 0	25 0 ..	40 0	
Beans, Tonquin .. per lb.	0 9 ..	1 6	1 0 ..	1 6	
Cardamoms, Malabar					
good	7 6 ..	9 0	10 0 ..	12 0	
inferior	5 6 ..	7 0	7 6 ..	9 6	
Madras	3 6 ..	8 0	5 5 ..	10 0	
Ceylon	2 10 ..	3 2	3 0 ..	3 6	
Cassia Fistula.. per cwt.	12 0 ..	30 0	16 0 ..	35 0	
Castor Seeds ..	10 0 ..	12 0	10 0 ..	12 0	
Cocculus Indicus ..	18 6 ..	20 0	19 0 ..	20 0	
Colocynth, apple.. per lb.	0 3 ..	0 6	0 4 ..	0 8	
Croton Seeds .. per cwt.	70 0 ..	75 0	62 0 ..	72 6	
Cubebs	25 0 ..	28 0	27 6 ..	32 6	
Cummin.....	48 0 ..	55 0	40 0 ..	55 0	
Dividivi	12 0 ..	14 6	12 0 ..	14 0	
Fenugreek.....	17 0 ..	25 0	13 0 ..	15 0	
Guinea Grains ..	23 0 ..	24 0	29 0 ..	32 0	
Juniper Berries ..	15 0 ..	15 6	10 6 ..	0 0	
Myrobalans	12 6 ..	17 0	8 0 ..	16 0	
Nux Vomica....	11 0 ..	17 6	10 0 ..	14 0	
Tamarinds, East India ..	2 0 ..	12 0	10 0 ..	16 0	
West India, new ..	10 0 ..	27 6	10 6 ..	20 0	
Vanilla, large per lb.	27 0 ..	37 6	32 0 ..	37 0	
inferior	10 0 ..	25 0	25 0 ..	30 0	
Wormseed	0 6 ..	0 0	35 0 ..	0 0	
GINGER, Preserved, in bond					
(duty 1d. per lb.) per lb.	0 6 ..	0 10	0 6 ..	0 8	
GUMS (see separate list)					
HONEY, Chili per cwt.	40 0 ..	60 0	45 0 ..	52 6	
Cuba	27 0 ..	42 0	22 0 ..	36 0	
Jamaica.. ..	36 0 ..	53 0	31 0 ..	52 0	
IPEACUANHA per lb.	5 9 ..	0 0	5 5 ..	5 6	
ISINGLASS, Brazil..	2 4 ..	4 5	3 1 ..	4 10	
Tongue sort ..	3 2 ..	4 8	3 5 ..	4 2	
East India ..	1 4 ..	4 0	1 9 ..	4 2	
West India ..	3 9 ..	4 0	4 1 ..	4 6	
Russ. long staplo	6 0 ..	9 6	6 0 ..	8 0	
" leaf	3 6 ..	6 6	3 0 ..	5 6	
" Simovia ..	2 0 ..	3 6	1 6 ..	2 6	
JALAP, good	1 8 ..	3 2	2 0 ..	3 0	
infer. & stems ..	0 6 ..	1 7	0 6 ..	2 7	
LEMON JUICE ... per degree	0 1 ..	0 1	0 1 ..	0 1½	
LIQUORICE, Spanish per cwt.	35 0 ..	37 0	0 0 ..	0 0	
Italian	40 0 ..	60 0	40 0 ..	60 0	
MANNA, flaky per lb.	3 6 ..	4 0	3 0 ..	3 6	
small.....	2 0 ..	2 2	1 9 ..	0 0	
MUSK..... per oz.	21 0 ..	35 0	17 6 ..	34 0	
OILS (see also separate List)					
Almond, expressed per lb.	1 2 ..	0 0	1 0 ..	0 0	
Castor, 1st pale	0 4½ ..	0 5½	0 4½ ..	0 5	
second	0 4 ..	0 4½	0 4 ..	0 4½	
infer. & dark ..	0 4 ..	0 4½	0 4 ..	0 4½	
Bombay (in casks)	0 4 ..	0 4½	0 4 ..	0 4½	
Cod Liver	5 0 ..	6 0	5 0 ..	6 6	
Croton..... per oz.	0 3½ ..	0 4½	0 3½ ..	0 4½	
Essential Oils :					
Almond	42 0 ..	0 0	42 0 ..	0 0	
Anise-wood	9 6 ..	0 0	7 9 ..	0 0	
Bay	65 0 ..	70 0	65 0 ..	70 0	
Bergamot	3 0 ..	15 0	8 0 ..	15 0	
Cajeput, (in bond) per oz.	0 2 ..	0 3	0 2 ..	0 3	
Caraway	5 6 ..	6 3	5 6 ..	6 3	
Cassia	4 2 ..	0 0	4 0 ..	0 0	
Cinnamon	1 0 ..	3 6	1 0 ..	4 6	
Cinnamon-leaf ..	0 2 ..	0 6	0 2 ..	0 6	

