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ADVERTISEMENTS of employers and assistants can be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

### DIARY FOR THE WEEK.

Secretaries of societies are requested to send early information of approaching meetings.

Thursday, November 3.

Chemists' Assistants' Association.—Social evening at 9.

Midland Counties Chemists' Association, Grand Hotel, Birmingham.—Opening meeting of the session, at 8.30 P.M. Inaugural address by Mr. George E. Perry, President.

Linnean Society of London, at 8 P.M.—Papers to be read:—1. "Sears on stem of *Dammara robusta*," by S. G. Shattock; 2. "Pennatulida of Mergui Archipelago," by Professor A. Milne Marshall; 3. "Ferns of Northern India," by J. G. Baker and C. B. Clarke.

Chemical Society, Burlington House, at 8 P.M.—"Note on the Atomic Weight of Gold," by Professor Thorpe and A. P. Laurie; "The Interaction of Zinc and Sulphuric Acid," by M. M. Pattison Muir and R. H. Adie; "A Note on Safety Taps," by W. A. Shenstone; "Note on Guthrie's compound of Amylene with Nitric Peroxide," by Dr. A. K. Miller; and "The Dehydration of Metallic Hydroxides by Heat, with special reference to the Polymerisation of the Oxides, and to the Periodic Law," by Dr. Carnelley and Dr. J. Walker.

### Suggestions.

(We invite contributions to this column.)

GROUND COFFEE digested in cod-liver oil quite overcomes the fishy taste of the latter.

FABRICS dipped in an aqueous solution of phosphate of ammonia, and dried, are inflammable.

DR. J. A. JEANSON recommends *asepsin* in 1-grain doses, well triturated with liquorice, as a remedy for offensive eructations. The powder should be taken after food.

IODIZED STARCH has been recommended as a substitute for iodoform, on the ground that iodoform owes its power to the iodine given off from it.

MOISTURE-PROOF GLUE is made by dissolving 16 oz. of glue in 3 pints of skim milk. If a still stronger glue be wanted, add powdered lime.

DIGESTYLIN, according to *Rundschau*, is composed of 10 parts of pepsin, 6 parts of pancreatin, 3 parts of ptyalin (diastase), and 0.25 part of chloride of sodium.

ARABIAN CEMENT.—Mucilage of acacia, made with acetic acid in place of water, makes a good and useful liquid cement. It cannot, of course, be used for marble.

URINAL CAKES.—These are much used for the disinfection of urinals. One form of these is made by fusing together sulphates of copper, iron, zinc, alum, and soda, and moulding into cakes.

STYPTIC COLLOID (as introduced by Dr. Richardson) is a saturated solution of tannic acid and gun-cotton in absolute alcohol and pure ether, with the addition of a small quantity of tincture of benzoin.

TO RESTORE FADED INK on parchment, &c., the Bodleian Library, at Oxford, has long employed solution of hydro-sulphide of ammonia, which is spread in a thin layer over the writing by means of a camel's-hair pencil.

TO remove the odour of iodoform from dispensing utensils, the hands, &c., the *American Druggist* recommends a watery solution of tannic acid, which leaves no odour of its own, destroys that of iodoform immediately, and can be washed off at once.

SOFT rubber goods, such as tubing, stoppers, &c., may be preserved by keeping them in tightly-closed tin boxes containing a sponge or bunch of matting moistened with benzine. Of course, this must not come into actual contact with the articles.

FLEXIBLE MUCILAGE.—To 20 parts of alcohol add 1 part of salicylic acid, 3 parts of soft soap, and 3 parts of glycerine. Shake well, and then add a mucilage made of 93 parts of gum-arabic and 180 parts of water. This is said to keep well, and to be thoroughly elastic.

TO CUT GLASS, place it in water on a level with the surface then clip it with a pair of scissors as if it were a piece of paper. To avoid risk, it is better to perform the cutting by taking off small pieces at the corners and along the edges, and to reduce the shape gradually to that required. The softer glasses cut the best, and the scissors need not be very sharp.

RHEUMATIC and gout nostrums contain colchicum, and it is well to keep in mind that Dr. A. H. Carter, physician to the Queen's Hospital, Birmingham, states (1) that colchicum should be avoided in all cases attended with debility and cardiac feebleness; (2) its use should not be continued for a longer period than is absolutely necessary for the relief of pain; (3) and it should be given in moderate doses, repeated at short intervals.

OPENING OF TEN NEW PHARMACIES IN BERLIN.—It has been decided to permit the opening of ten additional pharmacies in Berlin. That city will therefore in future possess 118 pharmacies, including ten Privat-apotheken, connected with hospitals &c. At present Berlin has 1,389,000 inhabitants, or about 13,000 to every public pharmacy; but the population increases at the rate of 36,000 per annum.

## Metropolitan Reports.

THE premises of the Royal College of Surgeons in Lincoln's Inn Fields are at present being enlarged by the addition of two storeys.

FIRE.—A destructive fire occurred in the East-end on Monday night, whereby the premises of Messrs. Foulger & Sons, oil merchants, Seven Star Alley, St. George Street, were totally destroyed.

THE ALLEGED LONG FIRM TRANSACTIONS.—The prisoners in this case were again brought before the magistrate at Lambeth last Saturday, and after several witnesses were examined as to the antecedents of the accused, the latter were again remanded.

THE DOCTORED MILK.—On October 21 Mr. A. Braxton Hicks concluded his inquiry concerning the death of the child to which reference was made last week. Dr. Thomas Stevenson now stated that he had analysed the viscera with the result that he failed to find any trace of poison. In the bottle of milk, however, he discovered one-tenth of a grain of morphine, which would be a dangerous dose for a child not accustomed to taking soothing syrups. That drug, he remarked, was invariably found in those compounds. The condition of the stomach clearly showed that the child had not been fed for some hours before death. The evidence was conclusive that death was due to exposure; in this the jury agreed, a verdict of "Wilful murder" being returned against the mother.

THE LONDON AND GLOBE DRUG COMPANY.—The case against George R'Eno was resumed on October 21. The prisoner is charged with having obtained 100*l.* from a young man named Bradley by fraud and false pretences, and also with having obtained considerable sums of money from a number of other persons by means of fraudulent representations. Mr. St. John Wontner, who prosecuted, stated that he now had received his instructions to carry on the prosecution on behalf of the Treasury, and, in commenting upon the fraudulent nature of the operations, said that the prisoner originally occupied an office on Holborn Viaduct, and when he left there was no doubt that he was in very embarrassed circumstances. He then took another office in Imperial Buildings, Ludgate Circus. The words "London and Globe Drug Company" were painted on the door, but all the business that seemed to be done by the prisoner was to sell pills. He advertised for a young energetic man to act as secretary to a public company, and as the result of this secured interviews with several young men, who were asked to advance money as security. In all the cases the parties lost the whole of the money they had deposited with the prisoner. Some further evidence was taken, and the case was again adjourned. The case was again gone into on Tuesday, when Mr. C. Kerr, a gentleman living in Redcliffe Road, South Kensington, stated that he had replied to the advertisement, and had undertaken to deposit a sum of 50*l.* He entered into an agreement that the money was to be deposited with the syndicate of promotion conditionally on the prisoner nominating him as secretary at a salary of 250*l.* a year, and that after the allotment had been made and his appointment effected, the amount should be invested in the company's shares. It was stipulated, however, that he must take the board's decision as to whether he was appointed or not. He paid the money in due course, but heard no more of the company, and had since instituted civil proceedings against R'Eno to recover the money. Arthur Potter, a youth, said the prisoner engaged him as canvasser, and got 5*l.* from him as security. Prisoner told him that he was "a ship's surgeon outfitter." He was to sell pills on board ship, but he visited three ships and was only laughed at. When he attempted to leave the East India Docks the constable at the gates seized his bag and pills. He returned to the prisoner, and the latter told him that he had bought the pills, and he (prisoner) should not take them back. Prisoner was again remanded.

NITROUS OXIDE GAS is reported to be used in the United States as an intoxicant, the exhilaration being considered far more pleasurable than that produced by alcohol.

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.*

### BATH.

A CHEMIST POISONED.—On Wednesday evening Mr. Robert Thurgood Oldham, carrying on business as a chemist under the name of Rickwood & Co., at 19 Kingsmead Square, was conveyed to the Royal United Hospital in an insensible condition, suffering from the effects of poison. Every effort was made for his recovery, but he never recovered consciousness, and died two hours after he was admitted to the hospital. It is said that the cause of death was an overdose of morphia, but the circumstances of the case had not transpired when we went to press, though various rumours are afloat. Mr. Oldham was about thirty-five years of age, and was married.

### BIRMINGHAM.

SMALLPOX has broken out in this town, but the measures taken to keep it under have been severe, and an epidemic is not expected.

THE MASON COLLEGE.—Three hundred individual students have entered attendance this session. This is a marked increase upon any previous session.

MR. JOSEPH ASH, one of the St. Bartholomew's Ward candidates for municipal honours, whose candidature is causing considerable excitement in the ward, is the son of an old Birmingham chemist and druggist.

ACCORDING to the official returns of the several assay offices for the year 1886-87 Birmingham still holds the lead in the manufacture of the precious metals. At the Goldsmith's Hall duty was paid upon 14,802 oz. of gold and 122,703 oz. of silver. This is consumed not only by the gold and silver smiths, but also by the jewellery trade.

PNEUMONIA OR HEMORRHAGE.—An inquest held on Monday on the body of a boy who had died from typhoid fever revealed the fact that "Mr. Brown, of Henley Street," is supposed to be a medical man, and for 3*s.* 6*d.* promised the mother to attend the deceased for a week. He did so, but as he was going out of town one day he asked Dr. Morris to call, which he did, but the mother did not like him, and called in Mr. Robins. The boy died, and the mother sent to Mr. Brown for a certificate; one signed by Dr. Morris was sent, which stated that death was due primarily to typhoid fever, and secondly to pneumonia. But Mr. Robins had a different opinion, and said that death was due to exhaustion following upon the hæmorrhage produced by typhoid fever. The matter got to the ears of the coroner; hence the inquest, at which the facts came out in their bareness, and the coroner broadly hinted that there was an arrangement between Dr. Morris and Mr. Brown. Nevertheless, the jury could only conclude that the boy died from typhoid fever.

### HANLEY.

THEFT.—Jane Tompkinson, domestic servant to Mr. James Farnival Eardley, chemist and druggist, of Market Square, was tried at the Borough Police Court on Monday and received a sentence of four months' imprisonment for stealing patent medicines, valued at 3*l.* 2*s.*, from her employer.

### KINETON.

THE SUSPICIOUS DEATH OF A MEDICAL MAN.—The brief history of the case reported last week was completed at the Kineton Police Court on October 20, when Symers Douglas McVicar, L.R.C.P., L.R.C.S.E., was brought up in custody, charged with having, on the night of October 9, killed George Garbutt Hutchinson, M.D., of Kineton. The magistrates present were Lord Willoughby de Broke and Mr.

W. H. P. Jenkins. The proceedings were of the most formal description. For the prosecution it was stated that Dr. McVicar was arrested because his nervousness during the inquest created suspicion; it was stated that no further evidence would be brought against him, and that the police were willing that he should be discharged. In the circumstances the advocate for the defence spoke briefly, and Lord Willoughby de Broke in discharging the prisoner gave him a lecture about attending patients while in an intoxicated condition.

#### KIRBY MALZEARD.

POISONED.—On Saturday a photographer, named Arthur Dean, committed suicide by drinking a poison, probably prussic acid or a cyanide, for death was instantaneous.

#### LANCASTER.

BRITISH DENTAL ASSOCIATION.—On Saturday a meeting of the Midland branch of this association was held in Lancaster, under the presidency of Mr. F. Bullin, J.P., Chester. A large number of dentists were present from Manchester, Liverpool, Bolton, Stockport, Rochdale, York, Leeds, Bradford, Darlington, and other towns. The business transacted related chiefly to the influence of the Dentists Act, 1878, upon dentists and the public. Dr. W. H. Waite (Liverpool), in an address on the "Constitution and Working of the British Dental Association," made an earnest appeal to dentists to maintain the honour of their calling, and so promote the public well-being.

#### LIVERPOOL.

FORGERY BY A DRUG CLERK.—A young man named John William Pilcher, recently a clerk in the employ of Messrs. Evans, Sons & Co., wholesale chemists, &c., Hanover Street, Liverpool, was charged at the Police Court on Tuesday with having forged a cheque for 138*l.* 6*s.* on August 10 last, upon the Liverpool and Manchester District Bank. The prosecutor stated that the prisoner had made a written confession which was submitted to the court. In this he stated that he had been induced by another youth (Cyrus Barlow) to forge the cheque, in order that they might go abroad together. The cheque was endorsed and presented by Barlow, and after they obtained the money they proceeded to London and shipped from there to Colombo. Both were arrested at Port Said, but Barlow succeeded in getting off and rejoined the steamer for Colombo. Pilcher appears to have been thieving systematically on behalf of Barlow, for he states that at one time he took a letter from Evans, Sons, & Co.'s private office, containing three postal orders for 1*l.*, 10*s.*, and 1*s.* 6*d.*, which he signed and cashed in different names, gave Cyrus Barlow 25*s.* and kept the remainder himself. About one month after Barlow was going on his holidays and again asked help; this time Pilcher took a letter containing one 5*l.* note and a postal order for 2*s.* 6*d.* He further stated that Barlow instructed him how to forge the signature of his employers by getting copies of the signature out of the letter book; a piece of carbon paper was placed over the cheque, and then one of the copies of the signature, and a tracing then made which was finally inked. The prisoner was committed for trial.

#### MANCHESTER.

A CHILD POISONED WITH FURNITURE POLISH.—An inquest was held on the 22nd inst. on the body of Arthur Archer, aged eight months, who while suffering from a cold received from its mother a dose of furniture polish in mistake for syrup of violets and oil of almonds. A doctor, who was called, could do nothing for it.

SERIOUS CHARGE AGAINST A MEDICAL MAN.—At the City Police Court on Monday, Joseph Armstrong, a medical and insurance agent, and Owen Gilmour, assistant to Dr. Marsh, of Rochdale, were charged with conspiring to defraud the Guardian Insurance Company and the English and Scotch Law Life Association, in respect of policies of 1,000*l.* (in each case) on the life of a Mrs. Casey. The prosecution alleged that the prisoners had endeavoured to insure Mrs.

Casey's life for the amount named by introducing for the doctor's examination another woman in perfect health, Mrs. Casey being at the time suffering from a fatal disease, and in a dying condition. The part that Gilmour is accused of having taken in the matter is that he testified he had known the person insured for the last six years, whereas she was a complete stranger to him.

#### MINEHEAD.

FIRE.—The Bristol Channel Chemical Works, belonging to Mr. Walter Helliur, were on Monday night totally destroyed by fire. The estimated damage is about 10,000*l.*, partly covered by insurance. The fire originated in the machinery department, but the origin of it is unknown.

#### ROCHDALE.

CO-OPERATIVE DRUGGING.—A number of delegates from co-operative societies in the Rochdale district met at Heywood on Saturday, and discussed the question of "medical co-operation." The general feeling was opposed to the establishment of medical institutions in connection with co-operative societies, but it was thought that drug dispensaries might prove beneficial if attached to the societies' establishments.

#### SHEFFIELD.

DR. SINCLAIR WHITE, Medical Officer of Health, has resigned his appointment. He has acquired the practice of Mr. F. Woolhouse, Brookhill, and intends to practise his profession in a less public fashion than hitherto. The value of the appointment is 500*l.* per annum.

A BIG DRAUGHT OF LAUDANUM.—Frederick Samuel Elliott, thirty-three, a butcher, residing in Grimsthorpe, committed suicide on October 21 by drinking a pint of laudanum. The deceased, who is the son of a chemist and druggist now dead, got access to the drug store kept by his mother, which is next door to his own shop. He selected a bottle containing a gallon of laudanum, and drank about a pint from it. Elliott died about twelve hours after taking the draught.

BOROUGH ANALYST'S REPORT.—The aerated water supply of Sheffield has had during the last three months some share of attention from the borough analyst. The result may be regarded as satisfactory from a sanitary, but not so by any means from a medical, standpoint. Four samples of lemonade and three of ginger-beer proved to be free from any trace of poisonous metals, mineral acids, or other objectionable impurities. Four samples of soda-water were free from lead and other objectionable impurities. They contained sodium bicarbonate to the amounts respectively of 0.6, 10.7, 11.2, and 27 grains per pint. Mr. Allen directs attention to the fact the British Pharmacopœia states that medicinal soda-water should contain 30 grains of the bicarbonate in each pint; that if the samples in question, therefore, were purchased as remedies, they were all but seriously deficient in the active ingredient, but if purchased as beverages they were quite unobjectionable in character. The proportion of soda in medicinal soda-water, the report goes on to say, is in excess of that desirable or pleasant in a beverage.

"TECHNICAL EDUCATION."—The following is an extract from a handbill now being issued by a recently passed man, whose pharmacy is to be found in a small town not twenty miles from Sheffield:—"—, the cheap chemist, having heard that unprincipled tradesmen are stooping to the dishonourable practice of selling imitations of patent medicines for the sake of extra profit, thereby deceiving the public by not selling the genuine, he has made arrangements whereby all patent medicines are examined before being sent out of his establishment, and he is, therefore, able to guarantee their genuineness. Think this over, and when you require the genuine article go to —'s."

#### STALYBRIDGE.

INFANTS' CORDIAL.—On Monday an inquest was held at Stalybridge, before Mr. Johnson, deputy-coroner, on the body

of an infant child named Herbert Crabtree, three weeks old, the illegitimate son of Margaret Crabtree, who died on Saturday morning. The mother deposed that the child was always cross, and as she had given it two doses of castor oil without effect, she sent to Nightingale, a grocer and confectioner, for some infants' cordial, which she got in a cup. She received no directions as to how it should be given, and gave the child not quite a teaspoonful. The child dozed after that, but when he woke up he looked funny, and she sent for Dr. Chamberlayne. In evidence Dr. Chamberlayne detailed the means which he had used for the child's recovery, but from the first the case seemed hopeless. As far as he could judge without analysis the cordial was composed of treacle, aromatics, and an opiate. In summing up the coroner recapitulated the facts which had been brought out, and pointed out that there was no doubt that the cordial contained laudanum. The jury agreed to a verdict of "Death from exhaustion after taking an overdose of laudanum." The coroner added that infant life was not safe when poisonous cordials could be purchased at small grocers' shops in Stalybridge without any label or directions. There was no telling what evil results might ensue. The legislature ought to step in and protect life to a greater extent than it did in the sale of those drugs. They might go and buy it easily, and administer it with results as in this case. They could not get poisons in that way, but that was actually as dangerous, as had been proved, and it was sold in the form of medicine. A juror: And in a teacup. The Coroner: I think the word "poisonous," or something of that description, ought to be marked upon it, and that it ought not to be sold in a teacup. If he had known that Mr. Nightingale was connected with the matter he would have had him summoned, for he was not free from blame. A juror: I think Nightingale ought to be made aware. It was agreed to warn Mr. Nightingale through the police, especially that he should not sell the cordial in a teacup, but in a bottle properly labelled.

## SCOTLAND.

## ABERDEEN.

INFIRMARY JUBILEE EXTENSION FUND.—Of the 30,000*l.* required, there has up to date been intimated or paid 25,566*l.* 14*s.* 2*d.*

MR. WILLIAM LOWRIE, M.A., B.Sc., the newly-appointed principal and professor of agricultural chemistry in Roseworthy College, Adelaide, is at present natural science master in Robert Gordon's College.

MR. ETTLES, chemist, Elgin, has resigned his position as a billie of that burgh. He has recently become tenant of the farm of Drumbain, near Rothes, which with his drug business in Elgin occupies his time fully.

DR. THEODORE CASH, the recently appointed professor of materia medica in our local university, was introduced to his students on Friday of last week, and gave an address on pharmacology and therapeutics.

## EDINBURGH.

MR. DANIEL FRAZER, of Messrs. Frazer & Green, Glasgow, has, with his family, come to reside in Edinburgh during the winter season.

MR. J. A. FORREST is having a handsome new double shop constructed for him next door to his present one in Brougham Place.

DEGREES IN PUBLIC HEALTH.—The Edinburgh University Court has considerably simplified the rules under which the degrees B.Sc. and D.Sc. in the public health department may be acquired. They now admit graduates in medicine of other universities, upon matriculation and attendance at two courses of lectures in the University. This condition will require only six months' residence at the most.

BANKRUPTCY OF A "CUTTING" GROCER.—Mr. David Peter, grocer, Home Street, was last week gazetted bankrupt. He was one of the first in Edinburgh, outside the legitimate trade, to dabble in patent medicines and cut the prices thereof. His advertisements appeared regularly in the local

papers, and always contained very low quotations for a few patents and proprietaries.

The WINTER SESSION at the University and Medical Schools of this city was opened last week, when most of the professors gave addresses suitable to the occasion. Professor Crum Brown, in the University chemistry class, did not follow this custom, but he said he would probably give them a concluding lecture at the end of the session. This announcement greatly tickled his young hearers. The subject of Dr. Stevenson Macadam's address was "Chemical Affinity and its Relation to other Physical Force." A fair number of pharmaceutical students were on the benches.

ON THE WAR-PATH.—The Inland Revenue officers are visiting chemists' shops in this vicinity just now and purchasing unstamped specialties, with the object of getting some of them with labels which they can bring themselves to say are liable to stamp duty. Several chemists in Edinburgh and Leith have already been mulcted in considerable sums as penalties for alleged infringements. It would be well for chemists to overhaul their labels and submit any doubtful ones to Somerset House, withdrawing meantime from prominence preparations labelled with the doubtfuls.

CHEMISTS', ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The syllabus of this association has just been issued. In addition to the meeting which was held on Wednesday evening, there will be twelve meetings throughout the session, including two open meetings, and two devoted to notes and queries. The arrangements for the open meetings are in the hands of Mr. Wm. Duncan and Mr. J. R. Hill. The latter, along with Mr. G. Coull, will also look after the notes and queries. The papers promised are:—(1) "Notes on Practical Pharmacy," by Mr. J. Mackenzie; (2) "Botany and Materia Medica, N. O. Leguminosae," by Mr. G. Melvin; (3) "Concentrated Infusions," by Mr. J. Wilson; "Analysis of 1,000 Prescriptions," by Mr. D. MacEwan; "Our Common Beverages," by Mr. T. McGarth; "Tr. Ferri Mur., Ed. Ph.," by Mr. A. W. King; "Leaves from a Pharmacist's Note Book," by Mr. J. R. Hill; "On Hypophosphorous Acid," by Mr. G. Lunan; "Compound Syrup of the Phosphates," by Mr. W. Taylor; and a nameless communication by Mr. A. R. Bennet. The conversation (which hitherto has been a popular feature of the association) will be held on Friday, December 23. The gratifying feature of the programme is that it contains a large number of new names, thus indicating that the working spirit, which has characterised the association from its commencement, is taken up by new-comers as old members leave the city. It is also noticeable that the committee has been able to formulate the programme without calling in outside aid.

## HAMILTON.

AN ALARMING FIRE broke out on October 20 in the shop of Mr. A. R. Stewart, chemist and druggist, at the corner of Church Street, Hamilton, and before it was got under damage to the extent of nearly 300*l.*, was incurred, which, however, is covered by insurance.

## Pharmaceutical Society of Great Britain.

AT a meeting the Board of Examiners for Scotland held in Edinburgh, on October 18, 19, 20, and 21, the following passed the Minor examinations for registration as chemists and druggists:—

Ardern, John William, Denton  
Bakes, Fred., Manchester  
Beanland, John Milner, Bradford  
Carswell, Thomas Retson, Paisley  
Cartwright, Benjamin, Glasgow  
Diek, David Laing, Glasgow  
Edmonson, Thomas, Liverpool  
Farmer, John, Edinburgh  
Fisher, William, Glasgow  
Gaddes, William, Brampton  
Gillanders, James, Dublin  
Graham, David, Glasgow  
Harwood, Benj. Hobart, Didsbury

Hislop, James Andrew, Hawick  
Kerr, George Jobling, Liverpool  
Maddock, Herbert, Birkenhead  
Matthew, John Ewen, Edinburgh  
Robinson, Thomas, Manchester  
Simpson, Peter, Glasgow  
Stevenson, Robert, Edinburgh  
Whiteley, John William, Liverpool  
Wilkinson, Frank Herbert, Birkenhead  
Wilson, Alexander, Greenock  
Wilson, Robert Wade, Manchester  
Wright, David Morgan, Edinburgh

## THE CHEMISTS' ASSISTANTS' ASSOCIATION.

## MR. GILES ON THE PHARMACEUTICAL RESEARCH LABORATORY.

At a meeting of the Chemists' Assistants' Association on Thursday evening, Mr. T. S. Dymond, president, in the chair, a paper was read by Mr. R. W. Giles, entitled "The New Departure," which was intended as the opening of a debate on the research laboratory of the Pharmaceutical Society. Mr. Giles commenced by stating that the title of his paper was given "sarkastical." He went on to remark that there was no finality in human affairs, which was a second way of saying that there is no peace for the wicked. This seemed true of pharmaceutical affairs, in which he saw many epochs, each indicative of change. Hope was the only birthright of mankind, and finality its ambition; yet to some extent finality was the equivalent of stagnation. Whether finality was attainable or not, he could say that it had not been attained in pharmacy. Advancement was their highest hope, and this led him to ask: Whither are we going, and what would the road lead to? He believed that pharmacy had the choice of two ways of probable advancement, viz., trades unionism and scientific development. His opinion was that the latter road was the only sure one, although from the first there had been some in the Pharmaceutical Society who had gone for the former. Mr. Giles proceeded to tell his hearers why the Pharmaceutical Society was founded, how the drug trade had in 1841 been threatened, and how that attack was repelled. The principle of the Society for advancement of the craft was, he maintained, in the words of a political novelist, "Qualify, qualify, quality." Should the Pharmaceutical Society, he asked, advance pharmacy by getting fresh legislative protection or by scientific development? He maintained that protection could only be got in a limited sense—only for the public good; and if any of his hearers thought otherwise they should take a new departure from the room, and get a copy of "the pleasures of hope" the first thing and study it. (Laughter.) What did it matter if the Pharmaceutical Society now took a new departure from what the founders had done? What should be done was to adopt what was now most expedient, just as in 1841 certain lines of action were adopted which suited the case then. He asked his hearers to contrast the existence of the purely trades-union societies of pharmacy with the Pharmaceutical Society, and went on to speak in an uncomplimentary tone of the United Society of Chemists and Druggists, its chequered career, and ignominious end; so also of the Chemists and Druggists' Trade Association. He admitted that it had held the field better than its predecessor, the predeceased, but he seemed to think that it had just escaped damaging the Pharmaceutical Society's relations with the Government departments. The Society had once only gone contrary to the Government, and that was when they refused to establish regulations for the storage of poisons. This was a deplorable breach of faith, from which it had never recovered. Prosecution and trade defence were not possible for the Society; its duty was to educate and raise the standard of qualification. This brought him to the heavy part of his subject—scientific development. The first thing to do in that was to extend education, if necessary enforce it. As compared with other professions the curriculum of ten months is extremely inadequate for persons aiming at professional status. The barrister requires seven years' study, and if he wishes to get on must take up purely secondary subjects. Chemists must adopt the same spirit for the mastery of details. After some further remarks on this subject, Mr. Giles asked his hearers to study Dr. Leech on the "Future of Pharmacy," and passed on to his old reasons for a research laboratory. The most serious stigma on pharmacists was, he said, their exclusion from the compilation of the Pharmacopœia; but, on more mature consideration, he now thought that they had not done what they might have in pharmaceutical research. The Pharmaceutical Society had taken the first step to remove the reproach by establishing a research laboratory. It might not pay the Society, for the work which would be done in it would be of an expensive nature, and just such as private individuals could not do.

Although he would not give details of the work which might be done in the laboratory, he mentioned the determination of the proper alcoholic strength of tinctures and the standardisation of potent preparations as subjects requiring attention. Apart from that there was work to be done for the aid of the therapist and the physiologist, who would there complete their labours; and so pharmacy and medicine would be made what they really are—two inseparable parts of one art. He next argued that the laboratory would be the only place to carry out the experiments necessary for the fulfilment of Mr. Reynolds's resolution for an unofficial formulary. He maintained that the British Pharmaceutical Conference could not do this properly; continuity was wanted, and that, he maintained, the Pharmaceutical Society could supply. He had been informed that he had misunderstood the object of Mr. Reynolds's motion, which was to get formulæ for Cocker's Pills; but the invention of spurious patent medicines was unworthy of the Conference and the laboratory. There was plenty of work in other lines; and that brought him again to the question, when would pharmacists have a co-ordinate share with physicians in the compilation of the Pharmacopœia? It would be when the work of the laboratory became manifest; and he was sure that doctors would welcome it. If that was the only result to be aimed at it was worth the trouble. He then went on to consider the financial side of the question, and confined himself to a reply to critics, saying that more room was required for museum and other purposes, and in the new building, the erection of which he said was consequent upon that, only the top flat would be devoted to research. He thought the accommodation was meagre, and the actual expense bore the same relation to the expenditure of the Society as the maintenance of a servant does to the whole expense of a household. (Laughter.) He then concluded an address which lasted fully half an hour by quoting the favourable opinion of Sir Henry Acland regarding the laboratory, and invited his hearers to express their opinions on the subject, to strengthen feeble knees, and arrive at a decision which would strengthen the Pharmaceutical Council in the good work upon which they had entered. (Applause.)

Mr. J. E. SAUL, on the invitation of the President, rose to move a resolution, and said that he (the speaker) was not a "Square" man, but he was for the research laboratory. He defended it on the score of expense, and also as a probable means of securing finality in pharmaceutical work. He believed that much would be accomplished in it of a pharmaceutical and scientific character, and it would assist in giving pharmacists status in the republic of science to which they had not yet been admitted as citizens. He could offer Mr. Giles the most cordial support of the Association, and concluded by moving a resolution to that effect.

Mr. PHILLIPS seconded the resolution, and Mr. W. G. BLACKHAM said the laboratory would no doubt elevate the tone of 17 Bloomsbury Square. The Pharmaceutical Society was established for the advancement of pharmacy and of pharmacists, and he protested that the projectors of the present scheme were not following the traditions handed down to them by the founders of the Society. He concluded by moving an amendment which stated that the laboratory would give no benefit to pharmacists.

After some remarks of Mr. MILLARD, Dr. REDWOOD said he was not altogether with Mr. Giles on many points. The paper was entitled "The New Departure," but when Mr. Giles was a student research work was done to a far greater extent than now. For twenty years past we had been retrograding instead of progressing. Students now came to the schools to prepare for their examinations, whereas they used to come for the acquisition of mere knowledge, and he feared that as the pharmacists became more scientific they would leave pharmacy for purer science.

The next speaker was Mr. Ince, and he said that the laboratory would be a good thing for students after they had passed their examinations. Professor Dunstan followed, and managed in a few seconds to make out a good case for the laboratory. If they elevated the scientific part of pharmacy, they would elevate the art of pharmacy. Higher education would not send men out of pharmacy. The Chairman then spoke, and the amendment was defeated. It was agreed to send the motion to the Pharmaceutical Council, Mr. Giles was thanked, and the meeting adjourned.

## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

EPIDEMIC VARIOLA has broken out at St. Denis, near Paris, and Le Chesnay, near Versailles.

PROFESSOR RAYMONDAUD has been elected for three years director of the Limoges School of Medicine and Pharmacy, his term to begin from December 31, this year.

PHARMACIST-PRINCIPAL MARTY, a member of the Academy of Medicine (section of pharmacy) and of the Paris Pharmaceutical Society, whose term as professor at the Val-de-Grâce has expired, has been appointed director of the Central Pharmacy of Military Hospitals.

THE NEW CREMATORY FURNACE at the Père Lachaise Cemetery has been given a trial this week. Two unknown and unclaimed bodies, supplied by the hospitals, were cremated, and in two hours left but eight kilogrammes of ashes. A committee, headed by Dr. Chassaing, of the Municipal Council, was present during the operation.

HOSPITALS FOR CONTAGIOUS DISEASES.—The Paris Municipal Council, in compliance with the conclusions of a report by Dr. Chautemps, have decided that new hospitals, designed especially for contagious diseases, shall be erected for adult patients, and that isolated pavilions for the same object shall be added to children's hospitals. The Trousseau Infants' Hospital will be the first modified in this manner.

PROFESSORS WANTED.—On May 5, 1883, competitions will be held before the Bordeaux Faculty for the following positions in the Toulouse School of Medicine and Pharmacy:—Assistant-professor of physics and chemistry, assistant-professor of pharmacy and materia medica, assistant-professor of pathology and internal clinics, and like positions not directly interesting pharmacy.

THE SOCIÉTÉ POUR L'AVANCEMENT DES SCIENCES, whose last gathering was at Toulouse, will meet on April 1, 1888, at Oran, Algeria, and in 1889 at Paris. Colonel Laussedat, the director of the Arts-et-Métiers Conservatory, is the president for the present year. The society numbers physicians and chemists of some note among its members, so that interesting memoirs on medicine and chemistry are often presented at its meetings.

THE DRAGON OF ANNAM, an order of the country, has been conferred by the Emperor of Annam on about eighteen French military surgeons there on duty; but not one military pharmacist is reported to have been honoured with the distinction. This is a pity, as the insignia are striking, consisting of an oval medallion, ornamented with red and yellow enamel, flanked with two green dragons rampant, and crested with the imperial bat.

STATUES FOR THREE.—A monument to the memories of Velveau, Trousseau, and Bretonneau is to be inaugurated on October 30 at Tours, 23,000*fr.* having been collected therefor by voluntary contributions. As the three celebrated physicians were natives of Touraine, it was thought they might have a memorial in common, so that the monument will represent them together, crowned with laurels by an allegorical figure of Touraine, their common mother.

THE FACULTY AT TOULOUSE has been reorganised by Ministerial order. The following are the incumbents of the chairs pertaining to pharmacy:—Dr. Basset, therapeutics; Lamic (a pharmacist of the superior class), botany and elementary zoology; Dr. Frébault, medical chemistry; Dupuy (a pharmacist of the superior class), pharmacy; Brœmer (a pharmacist of the first class), materia medica. The director is Dr. Caubet, who is also the professor of medical clinics.

THE COMPETITIONS FOR THE INTERNATE.—The adjourned competition for the medical internate took place on the appointed day, in the Avenue Victoria building, without any incidents or accidents, although *Mlle.* Blanche Edwards and other past-age candidates were allowed to compete. The results cannot be known for some time, but the medical and the daily press are not sparing in their criticisms on the shortcomings of the Assistance Publique. Fault is justly found with the board for not providing the candidates with better accommodation. They are only given narrow seats in an uncomfortable amphitheatre, and no desks or tables, so that they have to write for hours on their knees, with no

other convenience than a portfolio or drawing-board brought from home. And it is under such conditions that they have to compose an essay on difficult and unexpected questions, while outsiders are allowed to remain and overcrowd a hall already too small. The remedy for such abuses appears easy enough. One step has already been taken, namely, the admittance of none but candidates. The other desideratum—that is, better conveniences—can be secured whenever the board wishes to have them. Among the buildings belonging to the city there are many halls with tables and desks, often lent for the written examinations of candidates to the modest position of schoolmaster or the lower degrees, and there is no reason why the same accommodation should not be provided for the more important internate competitions. Candidates for the pharmacy internate are no better treated than medical students. The competition is held in the same hall, only as the candidates are fewer, and outsiders excluded, there is no overcrowding.

A NEW SOURCE OF CAPRIC ACID.—In a memoir presented to the Academy of Sciences, *M.M.* A. and P. Buisine have described a process for extracting this somewhat rare acid from sheep-wool washings, in quantities larger than from any other source. The washings are left to ferment for about eight days, during which time much capric acid forms that did not exist in the fresh liquors. The washings are then saturated with sulphuric acid, and shaken with ether to separate all the fatty substances, and among them capric acid, which is now purified by a rather long process here briefly delineated. The ethereal liquor having been filtered, the ether is evaporated off, and the residue exhausted with successive portions of boiling water, which dissolve out the moderately soluble capric acid and leave fatty substances behind. The acid liquids, being saturated with carbonate of soda, are concentrated by evaporation, filtered, and agitated with ether to remove all fatty matters. The caprate of soda is next decomposed with sulphuric acid, and the capric acid taken up by shaking with ether. On evaporating the ether a dark oily liquid is obtained, consisting of capric acid contaminated with volatile acids and oleic and œnanthylic acids. The volatile acids are driven off by ebullition with water. The oleic acid is separated out in the form of an insoluble oleate of baryta—this base having been added to slight excess—and the œnanthylic by dissolving the product remaining in boiling alcohol, which on cooling lets down crystals of almost pure œnanthylate of baryta, while the caprate remains in solution sensibly pure. Complete purification for chemical purposes may be effected by successive saturations with carbonate of soda, decomposition with sulphuric acid, and solution in ether, when a white crystallised acid is obtained, melting at 31° C., and forming a caprate of baryta which contains 28.50 per cent. of baryta, 28.60 being the theoretical figures.

## NEW COMPANIES.

R. W. THOMAS & Co. (LIMITED).—Registered with a capital of 20,000*l.*, in shares of 1*l.* each. Object, to acquire the business now carried on by Messrs. R. W. Thomas & Co., 10 Pall Mall, London, and Thornton Heath, Surrey, as manufacturers of photographic dry plates, collodion, varnishes, and other specialities, and dealers in all kinds of photographic appliances. The appointment and remuneration of directors will be settled by a general meeting of the shareholders, but meanwhile it has been settled that anyone nominated for the position must hold 100 shares in his own right.

THE AFRICAN INDIGO TRADING COMPANY (LIMITED).—Object, to trade in, grow, produce, farm, purchase, and sell all varieties of plants and crops from which indigo can be obtained; to manufacture indigo from such sources of supply, and generally to do all things conducive to the development of indigo production and trading. Capital, 100,000*l.*, in shares of 5*l.* each. The directors shall not at any time be more than seven, and except in the case of the first directors none but members who for the time being hold, and shall for six months consecutively have held, in their own right, 100 shares each, which may be shares issued as fully-paid, shall be eligible for directors. The remuneration of the managing director shall from time to time be fixed by the directors.

## AERATED BEVERAGES EXHIBITION.

THE ninth annual exhibition of apparatus and materials used in the manufacture of alcoholic and non-alcoholic beverages was opened in the Agricultural Hall on Monday, and has continued throughout the week, closing this evening. The exhibition loses none of its interest or popularity by age, as is evidenced by the fact that the whole of the ground-floor space of this gigantic hall is occupied with exhibits. The development is chiefly noticeable in the departments devoted to machinery in motion and brewing apparatus, although a speciality has also been made of tasting bars for wine and spirit merchants. Simultaneously with the exhibition the Brewers' Congress has been held, with good attendances at each meeting. The revenue returns continue to show a decreased consumption of alcoholic liquors, a fact which is generally, and we believe correctly, attributed to greater fondness for aerated and other non-alcoholic drinks. The explanation is so far satisfactory, but it should be observed that of recent years an industry—the manufacture of flavouring essences—has sprung up which lives upon the palate of the public. Some twenty years ago the common temperance drinks were soda-water and lemonade—too limited a choice to imperil the revenue from excisable liquors. Now the most fragrant synthetical products are called in to the aid of the essence-maker, and this undoubtedly has to do with the increased popularity of effervescing drinks. There has been immense progress also in mechanical contrivances, and in the smaller accessories for facilitating labour and adding elegance to the products. All departments were well represented at the exhibition, and may be considered in their turn.

## MATERIALS FOR AERATED BEVERAGES.

Messrs. W. J. Bush & Co. (Artillery Lane, E.C.) are in their old position with a good assortment of their well-known products. Amongst the novelties which they have ready for the winter trade are five new essences which are popular in the United States, and may fairly be put down as the spirit of American drinks. These are, American ginger-ale extract, essence of blood orange, essence of birch beer, essence of root beer, and essence of mead. These form very pleasing beverages. The firm also showed their preservative, which is possessed of great antiseptic power, and "detergine," a liquid for cleaning machinery which appears to act very effectually. Close to this firm Messrs. Stevenson & Howell (95A Southwark Street, S.E.) occupy a commanding position. Before entering their court the visitor's eye is caught by a striking poster relating to saccharine, for which, the exhibitors state, "there is an enormous field for experiment in connection with aerated waters, cordials, &c." Judging from the samples which they exhibit, Messrs. Stevenson & Howell have succeeded in overcoming the initial difficulties which attend the application of the new sweetener to aerated beverages. The lemonade made with their "soluble saccharine" cannot be distinguished from the sugar-sweetened article, and it has the great advantage of being unfermentable. The liqueurs made with saccharine are equally successful products. Amongst the essences exhibited by the firm the soluble essence of Jamaica ginger occupies the chief place. This essence is of a superior nature, and mixes with so small a quantity as ten times its volume of aqueous fluids without causing opalescence, nor is the brilliancy affected by the addition of acids. This characteristic has not been acquired at the expense of the active ingredient, for the flavour and pungency are remarkably distinct and "gingery." Essences for non-alcoholic sparkling moselle, apple champagne, soluble hop essence, refined caramel, and a large number of other specialities were shown.

Mr. C. W. Field (Liverpool) has a small stand devoted to essential oils, and fruit and soluble essences. Mr. Field's "S. S." brands of the latter are excellent products, the ginger and lemon being especially so. A series of champagne flavours, and an almost colourless liquid heading are leading lines in this exhibit. Messrs. Haynes & Finemore have introduced a new flavouring essence under the taking name "Phiz." It is an essence possessing an agreeable bouquet, and makes a pleasant beverage of the wine type. Pure colourings in powder, soluble essences of ginger, lemon, ginger ale, and hot stingo were included in the exhibit.

Messrs. Talbot & Co. (Gloucester) showed comparatively few of their essences, and the leading place was given to their ginger-ale essence, which makes a beverage possessing lasting brightness and full pungency and aroma. Messrs. Duckworth & Co. (Manchester) also exhibit in this department. Messrs. Hassall & Co. (York Road, N.), the makers of phospho-citric acid, are *en force* with the compound acid, and exhibit several trophies of its virtues in the shape of bottled lemonade, from one to four years old, made with the phospho-citric. Although a number of the bottles have leaked, owing to shrinkage of the corks and other causes, the remaining contents are perfectly bright, and free from sediment. We notice that Brin's Oxygen Company (Limited) exhibit water and milk aerated by the compressed oxygen made by the barium method. The oxygenated water is exhilarating, and a useful therapeutic as well as dietetic agent. The effect of the oxygen upon milk is to develop its nutritive qualities, while the presence of oxygen is said to prevent the development of disease germs in the milk. These beverages are highly spoken of by leading practitioners. The compressed oxygen manufactured by the company has already been referred to in these pages, and we need only now add that its use is extending.

## MACHINERY AND APPLIANCES.

The exhibits under this heading are not more numerous than they were last year, but since then several novelties have been introduced which are worthy of attention. Messrs. Barnett & Foster occupy their old position, immediately inside the main entrance to the hall from Upper Street, and their exhibit, as formerly, is of a varied and complete character. Their latest novelty is a bottle-filler, which is well worth the attention of those who put up large quantities of liquids in small bottles. It is called Foster's patent "Multiple" filling machine. The machine fills two dozen ginger-beer bottles at one operation, each with a stated quantity of beer. The essential parts of the machine consist of 24 way tubes, partly widened into a 10-oz. cylinder. The tubes are connected with the reservoir of beer or other liquid, and they are lowered by means of a lever. In operation, an ordinary ginger-beer box or tray, previously filled with clean empty bottles, is placed on the platform of the machine so that the necks of the bottles are below the tubes. When the lever is moved the tubes enter the bottles, and the contents of the cylinders are discharged into them. On returning to their original position the cylinders are again filled automatically. The machine reduces bottling to a low stage of mechanical labour, but it is remarkably ingenious, and so free from complication that Mr. Foster is sanguine that he will apply the principle to soda-water machines. Another labour-saving apparatus which occupies a prominent position on the stand is the "Eclipse" steam filling machine, for ball-stoppered bottles. This machine is constructed to fill two bottles at once—by this means, syringing, filling, closing, and delivering 120 dozen bottles per hour. Along with the "Champion," it was busy at work when our reporter visited the exhibition. The use of compressed carbonic acid gas, to which reference was made in our last report, has incited the production of an automatic valve arrangement between the bottle of the compressed gas and the gasometer. As soon as some gas is withdrawn from the gasometer, the latter falls, and thus pulls a weighted chain, which turns a cog-wheel, whereby a little of the compressed gas is emitted from the gas-bottle. This gas getting into the gasometer reverses the action, and the flow of gas stops.

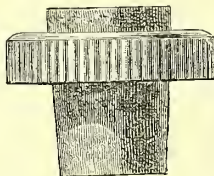
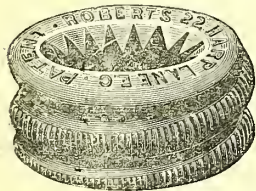
Messrs. Bratby & Hinchliffe (Manchester) make a leading article of Robertson's "Automatic Carbonator," the rights of which they have secured. This appears a somewhat complicated apparatus, but it is not so, and its action is simple. There are three impregnators in line; the first receives the charge of water and gas from the pump, the mixture ascends to the top and falling in finely-divided spray to the bottom, passes into the second, where the spraying is repeated, and so also in the third. The water is then discharged into the cylinder or receiver, which is so constructed that when it contains a certain volume of water it swings down, and, overcoming a balance-lever, shuts off further water-supply. When any of the contents of the receiver is withdrawn, the operation goes on again until the balance is restored. The great advantage of the carbonator is that it maintains an equal pressure under all conditions, for the

cylinder is perfectly closed when not in use, and it may be set in motion and left unattended all day, without incurring any risk or loss of material. It supplies one gallon of water one hour, and fifty gallons the next, and so on, without being re-adjusted in any way; it can also be set to any desired pressure. The firm also show specimens of a few of the many machines which they manufacture, as well as soluble essences and other materials required in the trade. They have just received notification of the highest award to them at the Adelaide Exhibition.

Mr. Dan Rylands (Barnsley) shows both soda-water machinery and bottles. Amongst the machinery are various specimens of McEwen's patents, including the "Economic" plant, new patent combined saturating cylinders, double anti-atmospheric purifiers, and McEwen's patent multiple steam bottlers, capable of filling three to six bottles at once. Amongst the bottles is the crystal valve self-opener. This is provided with a small button at the air-space of the neck; when the button is pressed some gas is emitted and the ball valve drops down. It is an ingenious method of overcoming the disadvantage in opening, which valve-stoppered bottles undoubtedly possess. The Riley Manufacturing Company (Efra Works, S.W.) are also *en evidence* with good examples of their manufacture, and the same may be said of Mr. H. Favarger (Turnmill Street, E.C.), whose new rapid syphon filler provides for filling and "sniffing" with one lever only, an advantage which bottlers will not be slow to admit. The filler is in two forms, one for plain and the other for syruped waters. In the case of the latter the "sniff" from one filling serves to force the syrup into the next syphon, which is placed in the machine. Other soda-water machinery, syphons, and Briet's gazogenes are also shown. Mr. Galloway (Bolton) has a striking but silent exhibit of his "Lancashire" machines, and a number of other pieces, including a "Lightning" filler, of which they boast that there are one hundred in use in a single factory in London. Messrs. Dance & Smith (Landport) show the "Rapid" attachment for fillers, which receives and conveys bottles to a rinsing-trough after they are filled. The great advantage of it is that it is applicable to any kind of machine. Mr. W. Eagles (Salford) also exhibits soda-water machinery.

#### BOTTLES, STOPPERS, CAPSULES, &C.

Most of the exhibitors in the previous class also show bottles. The other exhibitors of bottles whose goods should be examined are Messrs. Chapman & Son, Birkenhead; Sykes, Macvay, and the Codd Bottle Company (Limited), Castleford; and Messrs. Thomas Turner & Co. There are several bottle-washing machines at work. Of stoppers, the latest is the "Roberts's Capsule Stopper." This is a cork with a metallic



capsule attached to it. It will be seen that the cork is thoroughly secured to the metallic part by means of the teeth, although the cork may be readily extracted in order to replace it with a new one. The stoppers are made with and without a screw, the former being for liquids, such as aerated waters, which require this security. The contrivance is simple and very cleanly. Mr. Foster has devised a simple method for securing corks in stone bottles by driving a nail into them at an angle of 45° from the side. Messrs. Barrett & Elers exhibit their vulcanite screw-stoppers, and a full assortment of bottles to which they are attachable. The London Metallic Capsule Company (Limited) exhibit their improved metallic capsules, plain and coloured, with top and side stamps in coloured relief. These capsules struck us as being elegant, both as regards finish and beauty of colouring. The company also exhibit metal packages for tea, &c., and hydraulic and hand pressure capsuling machines. At another part of the exhibition the "Simplex" capsuling machine was in operation.

#### FILTERS.

Our space does not permit us to do justice to the numerous exhibits in this class. Amongst the exhibitors are the Maignen Company (Limited), the Universal Self-cleansing Filter Company (St. Mary Axe, E.C.), J. Halliday & Co. (Newtown, Manchester), H. Rawlings (Westminster Bridge Road), and the London and General Water-purifying Company. The first named of these exhibit on the most extensive scale, both the "Filter Rapide" and the application of the "Anti-calcaire" occupying a prominent part. Nickel's filter also attracts considerable attention.

#### MISCELLANEOUS.

Messrs. T. Symington & Co. (Edinburgh) have a tasting stall for their coffee essences, and F. King & Co. (Limited) have the same for their desiccated soups, both of which are much resorted to. The British Honey Company (Limited) have an attractive exhibit of honey in various forms, which they collect from the bee-keepers of this country. Beeswax is also one of their specialties. Both of these articles they are enabled to collect in large quantities, as the object of the company is the encouragement of apiculture amongst the rural population of the country. Isinglass is well shown by several firms. Messrs. Gridley & Co. (Bishopsgate Avenue) exhibit original packages of the various kinds, and series of samples showing how isinglass is cut. Mr. James Vickers (Devonshire Square) has a nice exhibit, prominent in which is their prize medal Russian isinglass, which is so familiar to chemists. Finings are also shown in great variety, and amongst the curiosities of the exhibition—excluding the man who sold Howard's 1-oz. camphor tablets at 2*d.* each—is a substitute for glass for the roofs of houses. This is a transparent flexible medium laid on a ground-work of woven wire. On inquiry we learnt that the composition consists of boiled linseed oil and varnish. It appears to be well suited for the purpose, and is said to be indestructible, and not liable to change by heat or cold.

#### AERATED WATER COMPETITION.

In connection with the exhibition prizes were offered for the best samples of ginger ale and fancy aerated beverages. The conditions of the competition were that makers should submit their samples in plain bottles for the ginger ale, and champagne bottles for the fancy beverages. Nothing was to be attached to the bottles which would lead to the disclosure of the maker's name, and half a dozen of one or both classes of beverages had to be submitted. The points which the jury had to decide were appearance of bottle, the opening outburst, taste and bouquet, effervescence, and foam-head. The jurors were Mr. Bratby (Bratby & Hinehliffe), Mr. Bush (W. J. Bush & Co.), Mr. Foster (Barnet & Foster), Mr. Howell (Stevenson & Howell), and Mr. Granville Sharp. The highest possible number of marks which could be obtained was 375. The first prize for ginger ale was awarded to Messrs. John Lyon & Co., of Liverpool, with 336 marks, and the second to Mr. G. Begg, of Bolton, with 295 marks. The next in order of merit were Messrs. Talbot & Co., of Gloucester and Monmouth, Messrs. Dows, Clark, Bray & Co., London, and Mr. Redgate, of Nottingham. In the fancy aerated beverages competition silver medals were awarded to Messrs. Dows, Clark, Bray & Co., and to Messrs. Lyon & Co., and next in order came Messrs. Talbot & Co., the Newry Mineral Water Company, and a firm the name of which could not be traced. There were sixty-five competitors.

OPIMUM-SMUGGLING INTO THE UNITED STATES appears to be on the increase. The American Customs authorities have just succeeded, at the cost of several thousands of dollars, in unearthing a huge opium-smuggling syndicate which operated in the United States *via* Victoria, British Columbia, the Canadian Pacific Railroad and Windsor, opposite Detroit. Last October ten boxes of opium were smuggled through this channel, and in November a similar quantity. A man of the name of Robert West, said to have acted as secretary to the smuggling syndicate, was finally arrested in Detroit and placed on his trial last month. He escaped with a fine of \$2,000, but it is thought that he has made some revelations to the authorities concerning the parties connected with him in working the scheme.



## PHARMACIST AND MANUFACTURER.

BY W. INGLIS CLARK, D.Sc., &amp;c.

ON this subject Mr. J. U. Lloyd recently discoursed, and you gave an abstract of his paper in your last issue. Broadly speaking, the author was desirous of publicly proving whether or not the modern pharmacist can economically prepare galenicals to compete with those turned out by the large manufacturer. There is no doubt that simply from the point of view of perfect production the pharmacist is not behind, but rather in advance of, the manufacturer. In investigating the subject Mr. Lloyd divides it under eight heads and a conclusion, these divisions corresponding to the factors which underlie a manufacturing process. Much unnecessary trouble seems to have been taken to prove that as regards the "quality of material," as well as the "experience and skill," the balance is equal if the turn of the scale does not dip retailwards, while the "improved apparatus" claimed by some manufacturers, if it exists at all, only gets the credit of making the article more cheaply.

Apart from the more trivial points, the author lays stress on other things, and endeavours to show that the possibilities are on the side of the retailer. It was to be expected that so accomplished and enthusiastic a percolator as Mr. Lloyd, accustomed to work with the greatest care, although I presume usually on a comparatively small scale, should make much of the "uniformity in the fineness," and the difficulties of moistening and evenly pressing the powders into the percolators. On the small scale it is true that, unless the greatest care is exercised in performing these operations, the process is apt to degenerate into a mere running of the menstruum through some more open part of the material, or, on the other hand, to come to a sudden stoppage altogether, but these minutiae lose much of their significance when larger quantities of material are worked with. More than one of the upholders of percolation in this country has declared against the fine powders, which, originating in American pharmacy, have been adopted in the British Pharmacopœia, the experience of our manufacturers being that such fineness is unnecessary and undesirable. Nor do the moistening and packing present any difficulties to those accustomed to do nothing else from day to day, the difficulties on this account becoming less as the scale is increased. It is, only fair to assume that those whose duties lead them to percolate both on the small and large scale, as every manufacturer must do, should be able to judge on this matter, and I have no hesitation in saying that the small scale is the one where most difficulties are experienced, the large scale virtually going by clockwork.

More important are Mr. Lloyd's criticisms under the two last heads. Starting with the assumption that 1,000 lbs. of material are under treatment, he asks:—"Should 1,000 pints of percolate be obtained in twenty-four hours or in three years?" while further on he states "that in large quantities manufacturers agree to increase the flow sufficiently to obtain the percolate in a reasonable length of time." I would ask, why should not the 1,000 pints be forthcoming in twenty-four hours? Usually the percolator for 1 lb. of drug varies from, perhaps, 6 to 12 inches in height, with a corresponding width, and in making a larger quantity the operator is apt to dislocate his proportions. It will be apparent that if in exhausting 1,000 lbs. of drug, instead of using one large percolator, we use 1,000 small ones, we should have no difference in the product, as compared with the single 1-lb. operation. And, similarly, if we used one large percolator of the same height, viz., 6 to 12 inches, it should make no difference, and therefore if 1 pint per twenty-four hours can be drawn on the small scale, so on the large scale is it possible even in the percolator assumed. In practice, however, larger sized percolators are of greater depth, a 20-gallon one being, say, 3 feet, a 50-gallon one 4 feet, a 100-gallon one 6 feet, and so on. In other words, if the 1-lb. percolator were made in the same proportions of height to drug as the large percolator (not of height to width) it should be, perhaps 20 feet high, with a diameter of  $\frac{3}{8}$  inch. Of course this would not be a working percolator; but I think Mr. Lloyd will admit that if it were possible to use such an one exhaustion would be much more complete, with

a limited amount of menstruum, than with one 12 inches high. In fact, as various writers have pointed out, a long percolator may be looked upon as a consecutive series of short ones, and in these, as is well known, the first members of the series may be exhausted even before the contents of the last ones have been moistened. It is the consecutive series of percolators that is used by the careful manufacturer, not one or two large ones, but from six to eight so proportioned to the drug under treatment, that the total depth of material through which the menstruum has to pass is always about 12 feet. With such simple appliances (perhaps not included in the "improved apparatus" so shortly dismissed by Mr. Lloyd) the manufacturer is able to obtain percolates of extraordinary strength and concentrated to a degree unattainable on the small scale. Thus in exhausting cascara bark with proof spirit the percolate has usually a specific gravity as high as 1.080, and those who have worked on the small scale know that this is a result rarely, if ever, obtainable in their experience.

Mr. Lloyd has, however, to a certain extent guarded himself against this advantage of the large manufacturer by expressly stating that more perfect exhaustion than that obtainable on the small scale is not allowable, and that therefore the strength claimed for the wholesale article is, if it is really stronger, an argument in favour of the extract prepared by the retailer. Without discussing this questionable doctrine further than to say that if 1 part of fluid extract is supposed to represent 1 part of drug, it should be the product of perfect exhaustion, I take up Mr. Lloyd's last statement, "Evaporation necessary in both cases." In an article entitled "A Protest against Evaporation in the Preparation of Fluid Extracts," I showed that by the use of consecutive series of percolators it was possible to prepare ext. sennæ liq., ext. ergotæ liq., and other preparations without any evaporation at all, and at the same time have complete exhaustion of the drug, while in other cases, where the quantities were too small to admit of this perfect working, the evaporation could be reduced to a minimum. Mr. Lloyd, however, ignores all this, and assumes that the liquid to be evaporated increases in proportion as the scale is larger, and on this supposition says, "As the amount of liquid increases, by ordinary methods of evaporation the large operator has to contend with a more continued application of heat out of proportion to that employed by the pharmacist on a small scale," adding that we have no direct figures showing the advantages of evaporation *in vacuo* in this connection. In this he is correct, for it is evident that unless, say, 4 gallons of liquid can be evaporated in the same time as 1 pint without increasing the temperature, the former must be at a disadvantage compared with the latter. In practice, the careful manufacturer, recognising this, evaporates his liquid in successive portions, so that the first 20 gallons requiring evaporation are not exposed to the heat which would be necessary to concentrate the whole of a 100-gallon lot, but only to its own proportion. Does Mr. Lloyd's argument, then, hold good? It has already been shown that it is quite easy on the large scale to obtain concentrated extracts far above the strength of 1 in 1 without evaporation, as, for example, 1 cwt. coffee beans exhausted in 2 gallons liquid, and the whole argument based on evaporation therefore falls to the ground, even the more completely so as it is admitted that evaporation becomes more and more necessary as the manufacturer reduces his scale for certain preparations which do not command a ready sale.

The whole question of "pharmacist *versus* manufacturer" does not seem so recondite as would be supposed from the paper referred to. It is evident that both, being only human, are liable to be either careless or ill-informed, while it is equally certain that enthusiastic and competent manufacturing pharmacists are not in proportion more numerous than their wholesale confrères. Therefore so far the balance remains equal, and it is good, nay, even desirable, that the retailer should make as many of his preparations as possible. But after all, does not the average pharmacist find it to his advantage, even from the sordid standpoint of money, to purchase from the wholesale manufacturer? and if, as it has been attempted to show above—modestly, it is hoped, but still with sufficient distinctness—the manufacturer has some demonstrable advantages on his side, while any difficulties only stimulate his ingenuity, it is hardly likely that the result will be uncertain, or that the wholesale manufacturing chemist will become as extinct as the dodo.

## KIRCHHOFF AND SPECTRUM ANALYSIS.

BY WILLIAM GILMOUR, F.R.S.E.

IT may not be uninteresting to many of your readers were your admirable, but necessarily condensed notice of the late Professor Kirchhoff last week supplemented by some fuller details of the work which he accomplished, and also some of its bearings on that department of chemical analysis more immediately connected with pharmacy. It is certainly not unfitting that a full tribute should be paid to one of the greatest, if not the greatest, physicist of the age, for it is not too much to say that from the date of Professor Kirchhoff's discovery of spectrum analysis a new epoch in chemical analysis was not only created, but a new science also—namely, that of solar and stellar chemistry. The delicacy of spectrum analysis, as also its importance in detecting new elements, has already been touched upon, so that these need not be further referred to at present, even although many interesting facts might be stated regarding them. One point might here, however, be mentioned as showing Kirchhoff's patient and careful observation—namely, that he mapped the spectra of over thirty different elements volatilised in the electric spark. To anyone unacquainted with the method of spectrum analysis the mere statement of this fact conveys but very little, and therefore it may be necessary to explain that the spectra of many of these elements are very complicated, containing as they do numerous bright light lines by which they are distinguished the one from the other. Unlike the ordinary operations in the laboratory of the chemist, spectrum analysis gives not one, but it may be twenty, fifty, or even a hundred reactions at once, so rich is it in results. Iron, for example, gives over seventy bright lines in one little portion (the green portion) of the spectrum alone, while the spectrum of all the metals contains a large number of bright lines, all more or less tending to overlap or interfere with one another, and therefore all more or less very complicated. The patient and laborious study involved in this operation of distinguishing and mapping out the lines of these thirty-two elements cannot well be over estimated, but the correctness of Kirchhoff's observations was such that they were seldom disputed even when tested under improved scientific appliances. One example may be given. When Fraunhofer first mapped the dark lines in the solar spectrum he only made out three hundred and fifty-four. Now upwards of two thousand have been discovered, the majority of which were mapped by Kirchhoff, and with such scientific correctness, that when later on photography was brought to bear on this department of investigation and a photograph of the solar spectrum was obtained, it was found to correspond with Kirchhoff's map in a most wonderful manner. Not less extraordinary was Kirchhoff's patient investigations into those phenomena from which he ultimately evolved a new system of solar and stellar chemistry. The "reversal" of the spectra of coloured flame, as already explained by you in the case of the sodium flame, involves, it will readily be understood, no less delicate and laborious observations than does direct spectra. Indeed it may be said, from its very nature, to be even more delicate and difficult. Take here again, for example, the case of the complicated spectrum of iron. Kirchhoff found no fewer than four hundred and sixty bright lines of this metal coincident with the dark bands of the solar spectrum. Try to imagine for a moment the patient labour of thus throwing the spectrum back upon itself, and then comparing and mapping line by line, and in the end not only getting light line against dark line, but the correlative fact that the brighter a given line, the darker the corresponding solar line, so as to confirm in a manner beyond the possibility of dispute the identity of the metal. The "reversal" spectra of thirteen different metals of sodium, calcium, barium, strontium, magnesium, iron, nickel, cobalt, chromium, copper, zinc, cadmium, and magnesium were all in this manner examined and mapped by Kirchhoff, and although the number of coincident lines found in some of the metals are not so large as in the case of iron, yet they are so distinct as to leave no doubt of their identity. The principle on which these phenomena are based has been simply put thus: "The relation between the power of emission and power of absorption of each kind of rays is the same for all bodies at the same temperature. From this proposition it follows that

a glowing body which emits only rays of certain wavelengths, likewise absorbs only rays of the same wave-lengths." From this we learn how the dark lines in the solar spectrum reveal the constituents of the sun's atmosphere. The more important results discovered by Kirchhoff were communicated in 1861, and the study of both solar and stellar bodies was entered upon with great eagerness and success by many enthusiastic experimenters both in England and upon the Continent. Wollaston, Fraunhofer, and Kirchhoff have laboured, and others have now entered into their labours, and whatever may be the future discoveries of the spectroscope no history will be complete without reference to the three names mentioned, and the greatest of them is Kirchhoff.

Just a word or two regarding spectrum analysis as applied to pharmaceutical chemistry. Many liquids, and many solids when reduced to the liquid form, yield very characteristic and beautiful absorption spectra—that is, spectra in which the bright colours are intersected by dark bands, as in the solar spectrum, only the bands in the case of the liquids are much more decided both in extent and depth. There is little doubt that the study of the spectra of liquids will grow in importance as the causes producing them and the various agents reacting upon them are fully known. The salts, for example, of the rare metal didymium can be recognised by their very broad dark absorption bands when present even in very minute quantity, a quantity indeed so small that to the eye the solution appears quite colourless. Salts of uranium also give very decided bands, while solutions of the two colouring matters of madder, viz., alizarine and purpurine, give quite distinctive and yet very characteristic spectra. Magenta gives one dark band, chlorophyll two and sometimes three, permanganate of potassium two, and blood two. In connection with the last three, and with several others as well, there is one remarkable feature exhibited, namely, that the appearance, position, and number of the bands can be changed by acting upon them with certain reagents. Thus ordinary red blood gives two very dark broad bands, while deoxidised blood has only one, and this one in a position quite distinct from the other two. These two spectra are convertible the one into the other by means of oxidising and reducing agents. Indigo also is capable of existing in two states of oxidation. Chlorophyll, on the other hand, can be acted upon by many agents, by the stronger mineral acids, by heat, by light, and probably also by the change of age, and considering the extraordinary number of pharmaceutical preparations into which chlorophyll enters, such as tinctures, extracts, oils, &c., it may easily be understood that the spectroscope might be made an important agent in detecting the purity and condition of numerous pharmaceutical preparations. Many chlorophyll-producing tinctures have been examined without the faintest trace of a dark band being perceived; the effects of light, exposure, and age have been shown upon many chlorophyll-producing substances, and they have been proved to be very active; many non-producing chlorophyll oils, such as sperm, lard, and almond, &c., have often been shown to produce unmistakable chlorophyll spectra, while, on the contrary, chlorophyll-producing oils, such as olive, rape, and even linseed, have shown none. Surely all this, and much more that might be indicated, shows that spectrum analysis has a potential energy in the future of pharmacy.

THE AMERICAN VERMILION INDUSTRY, which has long been in a very depressed state owing to ruinous competition among the manufacturers, has now been placed on a better footing. The American vermilion-makers have formed a union and agreed to fix a uniform price for the article. They now quote 55c. (2s. 3½d.) for wholesale quantities.

SELLING LIQUOR IN A PROHIBITION STATE.—The State of Kansas is one where a most severe law against the sale of liquor is in operation; and a young chemist's assistant at Wichita, a town in that State, has just been sentenced to no less than seventeen years and four months' imprisonment and a fine of \$20,800 for trespassing the liquor law. The owner of the Wichita "pharmacy" where alcoholic beverages were dispensed, to whom the unhappy youth acted as assistant, has decamped in time, and will thus escape punishment. The assistant, however, was caught and found guilty on over two thousand different counts, with the result above detailed. It is thought that the monstrous severity of the sentence will prevent it from being carried into effect.

## Legal Reports.

### APOLLINARIS AND APOLLINIS WATERS.

IN the Supreme Court of Judicature, Court of Appeal, on Tuesday, the matter of the Apollinaris Company (Limited) *v.* Herrfeldt & Campbell came before Lord Justices Cotton, Lindley, and Lopes, on appeal from an order of Mr. Justice Chitty, dated July 29 last, restraining the defendants from using the word "Apollinis" in connection with mineral waters sold by them.

Mr. Aston, Q. C., and Mr. Mooreshead were the counsel for the appellants; Mr. Romer, Q. C., and Mr. John Cutler represented the respondent company.

The plaintiffs are the owners of the well-known Apollinaris water, which is obtained from a natural mineral water spring called Apollinaris, in Rhenish Prussia. Defendants are the agents for another German water from the Kronthal Springs, in the Taurus mountain district of Germany, which up to 1876 had been called the "Saltzquelle." In that year the name of the spring was changed to Apollinis Brunnen, owing, it was stated in the English version of a pamphlet published by the Kronthal Bad Company and setting forth the attractions to tourists in search of health or amusement of the Kronthal Bad, to an authentic tradition of the pursuit by Apollo (*circa* 7946 B. C.) of a nymph, who, to avoid the pressing attentions of the god, plunged into the mountain stream, from which had since welled forth her tears in the form of a hot saline spring. It appeared, however, that in the original German pamphlet the incident was related not of Apollo, but of "ein Unhold" (ruffian or miscreant) whose name did not transpire. The defendants had lately, according to plaintiffs, adopted the name Apollinis on their labels and circulars. Previous to this their water had been known as "Kronthal," but in Germany its sale had been for some time carried on under the name of Apollinis. Upon the name Apollinis being introduced into England, the plaintiffs sought to restrain its use. The defendants asserted that the label could not be mistaken for the plaintiffs', and that ever since 1876 the words "From the Kronthal Apollinis Spring" had appeared upon their label. They also said that, by reason of a judgment obtained in Germany, the company for which they were the agents were entitled to call their spring "Kronthal Apollinis," and they (the defendants), being that company's agents, were entitled to sell the water under that name in England. There was no insinuation by the plaintiff company that the defendants' label was like the plaintiffs', and there had been no fraudulent use of the word "Apollinaris." The defendants insisted that their waters were honestly labelled, honestly advertised, and honestly sold as Kronthal natural mineral water from the Apollinis spring at the "Kronthal Bad, im Taurus," and that there had been no infringement of the term Apollinaris, in which, as a mere geographical name, there could not, it was submitted, after the recent decision in the "Melrose Favourite Hair Restorer" case, be any valid trade-mark. The judge in the court below came to the conclusion that the Kronthal Company had since 1876, when the fame of the plaintiffs' water was established, altered the name of one of their wells for the purpose of having a description like the plaintiffs'. He was of opinion that what the defendants had done was for the purpose of deception, and he therefore granted the injunction. The appellants now submitted that the decision of Mr. Justice Chitty should be reversed on three grounds: first, that there had been in fact no infringement of any trade-mark that the plaintiff company could claim; secondly, that there had been no sale or offering for sale of the mineral water supplied by the defendants in such a form, or under such a name and style, as to pass off their mineral water as the water of the plaintiffs; and, thirdly, that there was nothing to prevent the defendants selling the water as agents of the German company to whom the spring belonged under the name of Kronthal Apollinis, and that the user of the label in question had been long enough to entitle them to do so in any event.

Mr. Romer, Q. C., having argued the question of user, which point the respondents' counsel was alone called upon to deal with,

Lord Justice Cotton said that before the defendants changed the name of their spring the plaintiffs were entitled to the trade-mark "Apollinaris." The plaintiffs' evidence

that the name was changed with the view of interfering with the sale of the plaintiffs' mineral water was not answered by the defendants, and the only view his Lordship could take was that the proprietor of the water sold by the defendants, acting as his agents, had adopted the name "Apollinis" with the view of obtaining the credit gained by the plaintiffs' water, and in order unfairly to appropriate the same. The view taken by Mr. Justice Chitty was, therefore, in his opinion, perfectly correct. Nor had the plaintiffs forfeited their right to an interlocutory injunction by any *laches*, as was contended by the appellants. They had not slept upon their rights or lost them by delay. The plaintiffs had a right to the exclusive use of their registered trade-mark, and the decision in the Court below must be upheld. The appeal would therefore be dismissed with costs.

Lords Justices Lindley and Lopes concurred.

### THE SANITAS TRADE-MARKS.

IN the Chancery Division of the High Court of Justice on Wednesday, Mr. Justice Kekewich had before him the matter of the Sanitas Company *v.* G. Condy, trading as "G. Condy's Sanitant Company," and the "Condisanitas Company." The plaintiffs in the action asked for an injunction to restrain the defendant from using the word "Sanitas" or its derivatives in connection with the goods sold by him.

Mr. Aston, Q. C. (with whom Mr. Sebastian appeared), in opening the case of the plaintiff company, said that in 1876 Mr. Charles Thomas Kingzett, the managing director of the plaintiff company, invented certain methods of compounding certain elements which resulted in producing chemical compounds usable among other things as deodorants, disinfectants, and antiseptics. In the same year Mr. Kingzett entered into partnership with other gentlemen, and formed a company, which carried on business in Moorgate Street, in the City of London, and Bethnal Green, under the name of the "Sanitas Company." That company continued to carry on its business in the manufacture of a variety of articles of a chemical nature, which might be entitled generally as being "Sanitas" articles, until 1878. In that year the business was purchased by an incorporated company, called the "Sanitas Company (Limited)," who took over the business of the original company, together with their trade-marks. In connection with these, the old and new companies registered three trade-marks. The first was that of May, 1877, consisting of a fir tree with an oval garter, and inside the garter were the words, "Omnia sanitatem, omnia sanitas." In 1883, a new mark was registered, namely, a eucalyptus tree surrounded by the word "Sanitas." After the passing of the new Trade Marks Act in January, 1884, the company did what they had not been able to do previously, and registered the word "Sanitas" above; and from that time to the present "Sanitas, Limited," had been their trade-mark. In the month of October 1885 the plaintiffs ascertained that the defendant, trading as the "G. Condy's Sanitant Company" and the "Condisanitas Company," who carried on business in Mark Lane and at Battersea, was using on articles he sold two labels, one having on it the words "Geo. Condy's Liquid Sanitant Fluid," and both bearing the name "Sanitant Company." The plaintiff company wrote the defendant some letters on the subject, but did not at that time pursue the matter farther. Recently, however, the defendant had enlarged his operations, and advertised in the trade journals a new disinfectant under the name of "Condisanitas Crystals" and "Condisanitas." Thereupon the plaintiffs applied to Mr. Justice Kay, who granted the interlocutory injunction to prevent the defendant from using the word "Sanitas" in conjunction with the word "Condi," or in any other way which should be an infringement of the plaintiffs' trade-mark. The plaintiffs asked to have a perpetual injunction granted them, with the cost of the proceedings.

Mr. Kingzett and other witnesses gave evidence in support of the above statement.

Mr. George Condy, Q. C., and Mr. Brown, who represented the defendant, admitted the use of the word "Condisanitas," and a number of advertisements put forward by the plaintiffs.

At the conclusion of the plaintiffs' case, Mr. Condy, who had, he said, been briefed only the night before, asked for an adjournment to enable him to look up the authorities for

the purpose of arguing certain points of law which he desired to submit to the Court.

Mr. Justice Kekewich thereupon granted an adjournment until the following morning.

On Thursday morning Mr. Condy, addressing the Court, said it was an admitted fact that the word "Sanitas," in combination with other letters, had been used by the defendant as distinctively designating the goods he offered for sale. Of course had the word "Sanitas" been used without anything else, it would have been the most naked piracy in the world. But what Mr. Condy said was that he, being a rival of the plaintiff company, had naturally done his best. While asserting the right to call the articles what he pleased, he had done his best to give them a distinctive as well as an attractive name without trenching on any rights the plaintiffs possessed. Mr. Condy contended that the Court ought not to restrain the defendant from using any term by which any intelligent person who carefully examined it with other things, such as the label and bottle, would not be likely to be misled. He claimed the right to use the compound word "Condisanitas."

The plaintiffs' counsel were not called upon to reply.

Mr. Justice Kekewich, in giving judgment, expressed gratification that the law as related to trade-marks had lately been materially altered, and said that he hoped the Merchandise Marks Act would prevent with greater severity the infringement of trade-marks, and remove such cases as this out of that Court and take them before another tribunal. After hearing the evidence which had been tendered before him, he entirely concurred with the remarks made by Mr. Justice Kay in his judgment, based on the evidence given on affidavit. To his mind the very choice by the defendant of the word "Sanitas" was a distinct indication of fraud. He, therefore, without hesitation, granted the plaintiffs the relief they claimed, and gave them the costs of the action.

Messrs. Condy & Mitchell (Limited) send us a note asking us to state, if we publish a report of the above case, that they have no connection with the defendant, G. Condy.

## BANKRUPTCY REPORTS

### *Re* SAMUEL WILLIAM BRADBURY.

AT the Court of Bankruptcy on Wednesday, October 26, 1887, before Mr. Registrar Giffard, Samuel William Bradbury, of No. 1 New Oxford Street, commercial traveller, lately residing and carrying on business as a licensed victualler at Philip Lane, in the City of London, and also of Walton-on-Thames, formerly of Llandoverly, South Wales, and Birkenhead, sheep-dip manufacturer, applied for his discharge.

Mr. W. W. Aldridge, official solicitor, appeared for the Official Receiver; Mr. Houghton, counsel for the trustee; Mr. H. Reed for the bankrupt.

Mr. W. W. Aldridge read the report of the trustee, which was to the effect that no assets had been realised; that the bankrupt in 1876 commenced business as a sheep-dip manufacturer at Liverpool, and a few months afterwards sold his business to a limited company, which went into liquidation; that in 1880 he commenced a similar business at Llandoverly, which was sold for the consideration of 3*l.* a week paid to bankrupt's wife for a specified period; that until 1884 he carried on business as an hotel-keeper at Walton-on-Thames; and that from January to June, 1886, his wife conducted a restaurant in Philip Lane. In November, 1886, he was employed as a commercial traveller. He attributes his failure to liabilities (disputed) for costs in an action brought by him for libel and slander and expenses (unascertained) in connection with the winding up of a limited company at Walton-on-Thames. He kept the usual books of account. Other than as stated he had not committed any offence under section 28 of the Bankruptcy Act.

Mr. Houghton opposed on the ground that the bankrupt had failed on his public examination to render proper accounts; that he was without books, and under section 28 had been guilty of gross fraud in connection with the company referred to.

Mr. H. Reed objected to the reading of certain notes taken

at the public examination, and after some discussion the Registrar directed the bankrupt to be sworn and examined afresh.

Examined by Mr. Houghton, the bankrupt said he promoted a company to buy his business, and was assisted by a number of people. He went to Messrs. Reynolds and Lloyd as solicitors. Two meetings were held after the company was registered, and two directors were found; they were a Mr. Bamford and a Mr. Gaines. Bamford was a draper. He was not certain whether he was not at the formation of the company living in bankrupt's house. Gaines was a young man who had been a surgeon in Liverpool. He thought he was about twenty-four or twenty-five years of age. Was not asked in the action for libel whether Gaines was not under age. The reason of his being appointed a director was because of the slanderous reports made by Mr. Cooper and two other people to prevent bankrupt's getting respectable men. Messrs. Cooper were paying the costs of all the proceedings, and they had hunted him all about the country. He did not know that Gaines was paid *l.* a week while in his service. After the formation of the company Gaines was paid *l.* *1s.* a week as director's fees. He left about 1877. Would not say he was not there in 1878. Bankrupt did not know that Bamford died in 1877 until he heard it in court, when he was asked about the certificate of his death. From 1878 bankrupt was the only person purporting to be acting as director of the company. In 1879 a Mr. Morgan applied for additional shares in the company, and he issued certificates of those shares purporting to be signed by Bamford, who had been dead two years. Bamford had given him a power of attorney under which the name was written.

The Registrar: As I understand, Bamford was dead at that time?—He was dead then, but they were signed under the power of attorney. They were signed in that way in his lifetime when he was ill.

Mr. Houghton: Were you asked in the libel action how you came to issue shares in 1879 purporting to be signed by a man who had died in 1877?—I said I did.

The bankrupt was then examined with great minuteness as to several alleged discrepancies between statements made in the trial of the libel action before Mr. Justice Wills and those in his public examination before Mr. Registrar Linklater, all of which he denied.

Further examined: The power of attorney was prepared in 1876 or beginning of 1877, and Bamford was then very ill at bankrupt's house. The power of attorney was given there. Could not tell who prepared it. Believed it was on a printed form. He brought an action for libel against Cooper. The libel was that they had circulated a statement that he was a swindler. Cooper pleaded justification. Bankrupt was cross-examined, and afterwards consented to withdraw a juror without asking for costs, but he wished to tell the Court how that happened. It was the most outrageous fraud that was ever perpetrated. It was through Mr. Finlay. Witness's solicitor, Mr. Somerville, said he could not go on unless he got some more money. Witness told him he had no more, and was nearly exhausted. In 1878 he removed his place of business to Birkenhead. Bamford and Gaines had then both disappeared. Bankrupt did all the duties of manager, secretary, and director. Then a Mr. Walsh was appointed manager of the company at a salary of 30*s.* a week. There were no directors then. Walsh made a bill of sale of the assets and effects of the company in bankrupt's favour for 1,600*l.* That was in consequence of the continual harassing by Cooper. After the bill of sale goods were ordered in the name of the company. Some people supplied goods, but he believed that was at the instigation of Cooper. There were several actions, but the defence of the bill of sale was not put in because the bailiff had notice of that. In 1880 bankrupt went to Llandoverly and opened a similar business. From 1880 to 1884 he lived in a variety of ways, selling goods on commission, and was carrying on business independently of the company. There were no debts in that business.

The Registrar here interposed, and said that, having regard to the late hour and the other business before the Court, this case must be adjourned, and after some discussion it was adjourned accordingly to November 10, at 11 o'clock.

*Re* DAVIES & LAIRD, Liverpool, Paint Manufacturers.

The examination of these debtors was held on Monday, in the Liverpool Bankruptcy Court, before Mr. Registrar Cooper. The statement of affairs showed that on the joint estate the debts amounted to 1,236*l.* 12*s.* 1*d.*, and the assets to 759*l.* 9*s.* 5*d.*, less preferential claims 60*l.* 18*s.*, leaving a net deficiency of 538*l.* 0*s.* 8*d.* The separate estates showed deficiencies amounting to 39*l.* 12*s.* 7*d.* The debtors commenced business two and a half years ago, with a capital under 300*l.*, and it had resulted in a net profit of 82*l.* 6*s.*, and their personal drawings had amounted to 982*l.* 7*s.* 8*d.*, of which the debtor Davies received about 626*l.* 5*s.* 8*d.* Both debtors before coming to Liverpool had been in business in the Isle of Man, and the examination was adjourned for a fortnight in order to make inquiries regarding them.

*Re* JAMES READ HORNER, Salterhebble, near Halifax, Chemical Manufacturer.

The first meeting of the creditors of this debtor was held in the Town Hall Chambers, Halifax, before Mr. Thomas England, Official Receiver. The gross liabilities of the debtor are 414*l.* 16*s.* 11*d.*, of which 4*l.* only, for rent, rank as a preferential claim. The assets consist of stock-in-trade, 20*l.*; machinery, &c., 300*l.*; furniture, 5*l.*; the whole estimated to yield 120*l.*; book debts, 7*l.* 10*s.*; total, 127*l.* 10*s.* Deducting a preferential claim of 4*l.*, there is a balance of 123*l.* 10*s.* to meet the liabilities, the deficiency thus being 287*l.* 6*s.* 11*d.* The debtor states that want of capital and loss of business through the publication of a bill of sale are the cause of his failure. He commenced business in partnership with one John Carter, who provided the money, the bankrupt finding the skill. That partnership commenced at the end of 1884, and continued until June, 1887, when Carter retired, the bankrupt giving him a bill of sale for 300*l.*, for which he now ranks as an unsecured creditor. The bankrupt has had dealings with money-lenders, and appears to have been insolvent from the time he took over the business.

*Re* R. E. OWEN, Beaumaris, Medical Practitioner.

The Official Receiver's statement in this case shows that the debtor's liabilities were 5,502*l.* 3*s.* 3*d.*, and the assets, after deducting preferential claims, 2,087*l.* 2*s.* 3*d.* The assets, he considered, were very much over-valued. The debtor attributed his insolvency to excess of expenditure over income, sickness, and worry consequent upon the litigation arising out of a partnership dispute. On Monday Mr. Lloyd Griffith applied to Judge Horatio Lloyd, sitting at Bangor, for the confirmation of a scheme of arrangement under which a composition of 7*s.* 6*d.* in the pound was guaranteed. The application was granted.

*Re* WALTER H. SHELLABEAR, Stackpool Road, Southville, drysalter, Bristol.

The public examination of this debtor took place at Bristol on October 21. He formerly traded at Christmas Street, Bristol, with Jabez Clutterbuck, Joseph Griffin (the younger), and Edward J. T. Morgan, as Clutterbuck & Griffin, wholesale grocers and drysalters. The summary of the debtors statement of affairs showed liabilities to unsecured creditors amounting to 7,671*l.* 4*s.* 3*d.* There were also liabilities to creditors fully secured amounting to 550*l.*, the estimated value of securities being 650*l.*, leaving a surplus of 100*l.* to be added to contra account. The assets amounted to 322*l.* 6*s.* 6*d.*, leaving a deficiency of 7,348*l.* 17*s.* 9*d.* The Official Receiver's observations were to the effect that the whole of the debtor's liabilities arose from the non-payment of the last instalment of the composition privately arranged by the firm of Clutterbuck & Co. in which he was a recent partner, after being for fifteen years a traveller in the firm's employ. In reply to the Official Receiver, the debtor said he put 612*l.* into the business, and during the two years he was in partnership he did not draw as much from the firm by 100*l.* a year as his salary amounted to during the time he was employed as commercial traveller. After some conversation, during which sympathy for the bankrupt was expressed, it was resolved that the estate should be wound up in bankruptcy, the Official Receiver being appointed trustee.

## Gazette.

### PARTNERSHIPS DISSOLVED.

KITCHEN & SIMPSON, High Street, Southwark, and Leeds, hop merchants, dealers in patent malt, and importers of isinglass.

MASON, WAINHOUSE & Co., Manchester, chemical merchants. PHILLIPS & Co., Bridgnorth and Wellington, Salop, manufacturers of aerated waters.

READ, HOLLIDAY & SONS, Turnbridge, Huddersfield, Wakefield, Manchester, Glasgow, and Brooklyn, U.S., chemical and dye manufacturers and dyers. As far as regards C. Holliday.

RYAN & DEAN, Northleach, medical practitioners.

THRAVES, J., & WILLIAMS, W., Nottingham, mineral-water manufacturers.

THE partnership hitherto existing between Messrs. Edgar S. Wigg and H. J. Poole (Wigg & Poole), wholesale and retail homœopathic chemists and importers, of Adelaide, South Australia, was dissolved on August 13, and the business is now carried on by Mr. Edgar S. Wigg.

### THE BANKRUPTCY ACT, 1883.

#### FIRST MEETING AND PUBLIC EXAMINATION.

BOOTH, EUSTACE ROBERT (trading as Booth & Co.), Bishopsgate Street Within, and Digby Road, Green Lanes, oil and petroleum merchant. First meeting, Nov. 1, 33 Carey Street, Lincoln's Inn; public examination, Nov. 16, 34 Lincoln's Inn Fields.

#### ADJUDICATIONS.

BOOTH, EUSTACE ROBERT (trading as Booth & Co.), Bishopsgate Street Within, and Digby Road, Green Lanes, oil and petroleum merchant.

TATHAM, EDWARD, Flackwell Heath, High Wycombe, formerly of Henley-on-Thames, surgeon.

#### NOTICES OF DIVIDENDS.

HUGHES, THOMAS WILLIAMS, Bodfeddyg, Sarn Meillteyrn, Carnarvonshire, surgeon. First and final div. of 3*s.* 1*d.*, Nov. 4, Official Receiver's offices, Chester.

JOHNSON, GEORGE (trading as Johnson & Son), Godalming, grocer, tobacconist, and chemist. First div. of 2*s.* 6*d.*, any day, Mr. Oscar Berry's, 6 Arthur Street, E., London Bridge.

MARTIN, HENRY (trading as John Hassall), Northbury, Barking, Essex, and St. Paul's Churchyard, brush and comb manufacturer and sponge merchant. First div. of 3*s.* 4*d.*, any Wednesday or Thursday, Metal Trades' Association offices, 37 Upper Thames Street.

ROBERT, THOMAS, Holyhead, and Brynsciencyn, Llanidan, Anglesey, chemist. Second and final div. of 1*d.*, Nov. 4, Official Receiver's offices, Chester.

## Personalities.

MR. NEIL S. CAMPBELL, of Colombo, Ceylon, left Southampton on October 23 in the North German Lloyd steamer *Bayern* for Colombo.

PROBATE has been granted to the will of the late Alderman John Williamson, J.P., late of South Shields, chemical manufacturer, and of the Villa Guiseppina Cadenabla, Italy, who died on July 9 last, aged sixty-five years. The value of the personal estate has been declared at 45,263*l.* 1*s.* 7*d.* He bequeaths to his nephew, Edmund Johnson Garwood, 200 shares, of the nominal value of 10,000*l.*, in the Jarrow Chemical Company; to his niece, Miss Margaret Ann Garwood, 200 shares in the same company; amongst the three daughters of his sister, Mrs. Mary Stark, 120 shares, of the value of 6,000*l.*; to Louisa Fife, at present residing at the Villa Guiseppina, 40 shares, of the value of 2,000*l.*; and the residue of his personal estate and all his real estate he bequeaths and devises to his wife, Mrs. Ann Williamson, who is the sole executrix.

## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.C.

From the "*Trade Marks Journal*," October 26, 1887.

- "ROUTLEDGE'S MIXTURE FOR THE CURE OF GOUT, BRONCHITIS, ASTHMA, AND OTHER INTERNAL COMPLAINTS," and other wording, on label; for a medicine. By S. Routledge, rigger, 17 East Street, Marylebone, W. 60,448.
- "HEALTH COCOA," other wording, and figure of Hygiea, on label; for cocoa. By H. Thorne & Co., Leeds. 62,594.
- "GENUINE REFINED RAPE OIL," and other wording, on label; for rape-seed oil. By Hirsch's Copenhagen Oil Mills (Limited), 31 Great St. Helens, E.C. 62,814.
- Heraldic design (griffin, with mortar and pestle, and motto "Be ready"); for drugs and chemical substances, including taraxacum for dandelion coffee. By N. H. Martin and C. E. Stewart (trading as Brady & Martin), Mosley Street, Newcastle-on-Tyne. 63,609.
- "PRIZE MEDAL MEDICATED HONEY SOAP," on label; for the same. By Townend & Smith, wholesale grocers, Keighley. 63,641.
- "GAMGEE'S FLUID"; for a preparation for use in medicine and pharmacy. By The New Chloralum Company (Limited), Wilmer Gardens, Kingsland Road, E. 63,799.
- Figure of a comet; the same with wording on label; for chemical substances for use in medicine and pharmacy. By Dr. F. A. Richter (trading as F. Ad. Richter & Co.), 1 Railway Place, Fenchurch Street, E.C. 63,861-2.
- "ROYAL SAFETY OINTMENT," and figure of an ointment bottle; for an ointment. Mary Harrison, The Mays, Ladbroke Road, Epsom. 63,994.
- "ACME HAIR CREAM AND ELIXIR"; for a cream for the hair. By J. J. Geake, St. Thomas Road, Launceston. 64,165.
- "SWIFT'S SPECIFIC," other wording, and scene representing Uncle Remus gathering roots; for Swift's Specific. By The Swift Specific Company, 35 Snow Hill, E.C. 64,247.
- "S. S. W." as monogram; for dental stopping and other dental requisites. By the S. S. White Dental Manufacturing Company, Philadelphia. 64,312.
- "PROPERT'S BRILLIANT FURNITURE CREAM," other wording and figures, on label; for furniture cream. By B. Beddow & Sons, 142 Battersea Park Road, S.W. 64,388.
- "STOCKER'S CARBOLITA MELSTILLA OR HONEY DROP," and other wording, on elaborately designed label; for a toilet preparation. By George Stocker, Exeter. 64,482.
- "JOHN WOOLDRIDGE," as signature on card; for patent medicines. By J. P. Lilburn and H. Powell (trading as John Wooldridge), 9 Great St. Helens, E.C. 64,672.
- "BURDOCK PILLS," and signature; for pills. By J. Thompson, pill maker, 44 Oxford Street, Swansea. 65,119.
- "BELL'S ANTI-CURBINE," on figure of a horse's leg; for a veterinary preparation. By H. Bell, chemist and druggist, Waterford. 65,145.
- "THE CHALLENGE ORANGE QUININE WINE," and other wording, on label; for the same. By Anderson & Shaw, Morrison Street, Glasgow. 65,174.
- Figure of a case of bottles, with wording thereon; for mineral and aerated waters. By H. Backhouse & Co. (trading as The Bee Aerated Water Company), Dundalk. 65,253.

## Trade Notes.

HOGG'S HOREHOUND HONEY COMPANY (LIMITED) ask us to state that their address is at 46 Southampton Row, and not at 64 King William Street, as stated last week. The latter address was printed in a pamphlet which was sent to us by the company.

MESSRS. JOHN DAVIS & Co. (LIMITED), of 201 Old Kent Road, send us a sample of their toilet almanac for 1888. It has a pretty cover lithographed in colour, and in a very small compass contains a great deal of useful matter, much of which is very appropriate for chemists to circulate. A few pages of ruled writing-paper for memoranda are stitched up with the rest.

UNDER the style of Vée & Co., a company has been formed at Paris for the trade in raw drugs and pharmaceutical products. The company's capital is fixed at 800,000*f.*, of which 320,000*f.* are "en commandite," and the partnership is entered into for a term of eleven years and nine months. The offices of the company are at 24 Rue Vieille du Temple, Paris, and the works at Tory-Port.

AT the Sanitary Congress which was recently held at Bolton, Messrs. Burroughs, Welcome & Co., of Snow Hill, exhibited the Kepler malt extract and its preparations, as well as Fairchild's digestive ferments, and for these the committee, of which Mr. Roger Fields, B.A., was chairman, have awarded them a medal and special certificate. This is the only award of the kind which has been made to pharmaceutical or dietetic products.

MESSRS. W. H. BAILEY & SONS, of 38 Oxford Street, W., have just issued a new catalogue of the surgical appliances, abdominal belts, &c., made by them. The catalogue is well illustrated, and contains simple directions for measurement. The prices attached in some cases are both the wholesale and retail, but this is not uniformly done. It would be better and more convenient if retail prices only were given, and a note made of the discount allowed to retailers. Then the price-list could be shown to customers without exciting comment.

NOTES ON NEW REMEDIES.—Messrs. Southall Bros. & Barclay, of Birmingham, have just issued a neat 20 pp. pamphlet entitled "Notes on New Remedies." The Unofficial Formulary preparations get the place of honour in the pamphlet, each formula having a pharmaceutical or therapeutical note attached to it. The new remedies which are the subject of *notanda* are those which have been introduced since the publication of the B.P., 1885. The notes contain all that the prescriber wishes to know, expressed pithily. The pamphlets do not bear the name of the firm upon them, as they are intended to supply a want which has long been felt by chemists, viz., a means for letting medical men know what is new in therapeutics. They are supplied at 10*s.* per one hundred, or 3*d.* per single copy, and as they are specially adapted for distribution amongst medical men, we expect that many chemists will take advantage of them.

A CHEMIST ATTEMPTING SUICIDE.—An extraordinary story is reported from Paris. A young married chemist's assistant in that city, in a moment of absent-mindedness committed a trivial mistake in dispensing. Although the blunder entailed no serious consequences whatever to the patient, the assistant was dismissed by his master, and vainly tried to gain employment elsewhere. Left without any resources he meditated suicide, and suddenly jumped out of the window of his room, on the fourth floor in the Rue Brantôme. His wife, by a rapid movement, succeeded in catching him by the leg just as he was disappearing into space, and kept him suspended until assistance arrived. He was pulled back into the room safely, but, still brooding over his unfortunate position, walked out into a crowded thoroughfare and threw himself under the wheels of a passing cart. The driver, by a violent effort, stopped his horses, and the unhappy pharmacist was extricated from under the vehicle alive and unharmed, and taken to the police station. The head officer, hearing his pitiful story, succeeded in obtaining temporary employment for him as a street sweeper, in which humble capacity he is now earning his bread.

## AT THE COUNTER.

MR. P. D. LE BROCC (Jersey) has had to supply "1*l.* of ammunition for a baby" and "1*l.* ton of bricks." Magnesia and turmeric were the drugs dealt in on those occasions.

LITTLE lad to chemist: "Please, sir, gie me a pen'orth o' Epsom salts." As the chemist weighs out the medicine the lad pathetically observes: "Don't give me full weight, sir, as I've to tak' 'em myself!"

AT A CHEMIST'S SHOP AT HORSHAM.—Father comes in with little boy about four years old. Boy, seeing coloured water in window carboy, asks, "Father, did that water come from the *Red Sea*?"

A STOCKPORT chemist writes:—"A lady customer of mine asked her servant if there were any fly-papers in the house. The reply was, 'Yes, 'm, but they're old; there's no nourishment in 'em.'"

A CHEMIST in North Yorkshire sends us original orders for the following:—"Magney winsh" (mahogany varnish), "redspiby," "queen ann of arion," "anna wine" (an ingenious way of getting over that difficulty), "sure ap squeals" (syr. scille).

THE following was recently presented to a Victorian chemist to be dispensed:—"For distemper in dogs. Get two grains of palamel and two grains of tartar of matick. Give the palamel first, and for two hours tie the dog up so as to get no water, and then give him the tartar of matick. After he or she throws up, give him a dose of castoroil."

ENTER Juvenile Customer: Presents a piece of paper on which is written—"1*l.* Diaphragm." Chemist: "What is it for?" J. C.: "It's to make plasters with. My mother didn't know how to spell it, so she looked in the dictionary." Chemist supplied the required article.

EFFECT OF THE DROUGHT.—A Dewsbury chemist writes:—"A customer from a neighbouring village wanted some poison for a cat which had been taken poorly. I suggested that he should drown it. To which he replied, 'Drown it, man; why where am I to get the water to drown it with?'"

BON ACCORD (Far North) says:—"The following happened to-day. A lady customer, who has been in the habit of getting double quantity of prescription at a reduced rate, came in a few minutes ago and said, "I'm needin' mair draps, but I'll only tak' half o' the double quantity this time."

"1*l.* of each Ata te fet ta te and yellow Busy Lickin.' That is how they ask for them, by written scroll, in the neighbourhood of Manchester, even since the visit of the British Association and Pharmaceutical Conference. "Paddy got it and Oil ff Almims" is quoted from another order in the same locality.

THIS is a Liverpool production:—"Please Mister — my baby as been vaccination going on 3 months and it tis not better yet I want to ask you if Marshm alie ointem do it any arme as it youse up out of the porse it youses mather and send me a penny worth of any thing it would to it any good."

CHOCOLATE sends us the following, which have been ordered to him recently:—"Oil of Jupiter (juniper); intellect (conf. senna); tantanfasod (tartaric acid); Powell's blossom of anised; Spanish black (liquorice); tambourines (tamarinds). A servant girl asked for the latter, and was advised to try a music shop. Her reply, "that they were for a sore throat," led to the discovery of the article required.

"GILES," said the master of the Norfolkman, "go to the chemist and get your mistress another box of glycerine jujubes." "Ees, sir"; and off he went, repeating to himself, "glycerine jujubes—'lisreen jubes—reen jubes—clean jews," and so on, until, when he got to the chemist's, all he could say was, "Please give oi some more or them there things what the missis sooks."

THE following "Scene at the shop counter" is sent to us from Birmingham. Enter young fellow, decently dressed. (The nist smiles at him, and mentally takes his valuation as at least 1*s.* for the till.) Customer: "Give us a cork, gaffer; they'm so bloomin' dependent at that there 'orspital."

Chemist: "We charge 1*d.* each for corks." Customer: "Oh, do yer? I'll go and hev arf a pint and beg one from the corner; but, I say, mister, can yer tell me what this stuff is made on? it tasties like ink."—Chemist: "I shall have to make a charge for testing it for you: are you willing to pay?" Customer: "No bloomin' fear. It ain't much I spends in druggisting or doctoring." Exit. Re-enter customer: "Say, young feller, would yer mind gi'ing us a dost of this in a measure?" Chemist: "Drink it out of the bottle." Customer: "But it says put some water to it, and I aint er goin' home yet." Chemist: "Give me your bottle." Goes behind "dispensing department," measures out dose and hands to 'orspital patient, who retires wiping his mouth. Chemist wishes him good morning, and blandly smiles on an old lady who inquires if he sells pennyworths of Beecham's. N.B.—There was 5*ij.* vin. ant. tart. added to 'orspital patient's draught.

THIS conversation occurred at Nottingham:—Lady (with slight lisp): "If you please, I want a pennyworth of *doo*."

Chemist: "I beg pardon?"

Lady: "If you please, I want a pennyworth of *doo*."

Chemist (rather perplexed): "May I ask for what purpose it is required?"

Lady: "I understand it is a good thing to give babies when constipated."

Chemist: "Perhaps you have mistaken the name, and require manna?"

Lady: "Oh, yes. I knew it was something that fell from heaven, and thought it must be *doo*."

A DOG-FANCIER in the Eastern counties gives the following elaborate recipe for mange:—Wash the dog well in soft soap; next day rub him well with following:—

2*l.* sulphur brimstone  
2*l.* spirits turpentine  
2*l.* ground saltpetre  
2*l.* hunchcon or blue ointment  
4*d.* sweet oil  
—  
1*s.*

Mix all together; stir well with poker made red-hot; when cold, rub in and let dry. Next day wash him with parafin diluted with water; next day wash with carbolic soap, and in a few days he will be to perfection.

PHARMACEUTICAL AMENITIES IN THE NORTH.—Gutter girl: "A penny's worth o' perceptivity."

Gentle pharmacist: "Is it powder or the ointment?"

Gutter girl: "I dinna ken."

Gentle pharmacist: "Do you know what it is for?"

Gutter girl: "It's for my mither."

Gentle pharmacist: "What is your mother going to do with it?"

"Gutter girl: "I dinna ken."

In this dilemma ointment is given, as being likely to be more immediately useful; but after the lapse of a few minutes the child re-enters the shop asking for "perceptivity pooter," returning the much-soiled box of ointment.

Gentle pharmacist: "What did your mother say for sending you for the wrong stuff?"

Gutter girl: "She said ye wis a dozzened brit."

A NEW CUSTOMS TARIFF will shortly come into force in the Central American Republic of Nicaragua.

FROM October 1 of this year all indiarubber, balata, and gums exported from British Guayana are subject to a royalty or export duty of 1 cent per lb.

FATAL DOSE OF EPSOM SALTS.—At an adjourned inquest held on Wednesday by Dr. Danford Thomas, a servant girl named Sarah Jane Smith, of Hornsey, was found to have died from taking an ounce of Epsom salts. The evidence showed that deceased had been much troubled about an engagement, and that she had intimated suicidal intentions. From analytical evidence, however, given by Dr. Arthur Pearson Luff, and medical evidence by Dr. Webb, it appeared that no poison had been taken, and the last-named witness expressed the opinion that deceased, having taken an ounce of Epsom salts on an empty stomach, had suffered intense pain, and that the heart had not been able to recover power.

**THE CHEMIST AND DRUGGIST.**

HEAD OFFICE—  
42 Cannon Street, LONDON, E.C.  
BRANCH OFFICE — MELBOURNE, AUSTRALASIA.

**NOTICE.**

CHEMISTS having Special Positions (only) to Let for Advertisements in forthcoming PRICE LISTS and ALMANACKS are requested to quote for same to THE "SANITAS" COMPANY, LIM., LETCHFORD'S BUILDINGS, BETHNAL GREEN, LONDON, Manufacturers of the PATENT "SANITAS" DISINFECTING, TOILET, and VETERINARY PROPRIETARIES.

**"SANITAS."**

CAUTION.—The fancy word "SANITAS" is our Registered Trade Mark.

**THE BEST DISINFECTANT.**

Non-Poisonous. Colourless. Gives no Stain. Fragrant.

Fluids (Fresh Water, Sea Water, and Crude); Oil; Emulsion; Insecticide; Powder; Sheep Dip; Hard, soft, Animal, Brown Windsor, and Toilet Soaps; Soap Powder; "Sanitas" Disinfecting Jelly; Veterinary Ointment; Tooth Powder; Toilet Powder; Toilet Fluid; Furniture Cream; Antiseptic Gauze; Fumigators; Air Purifier and Urinal Tablets.

GOLD MEDALS, Calcutta, 1884, and Paris, 1885.

*Liberal Terms, New Show Cards and Bills to the Trade.*

Sole Manufacturers, **The "Sanitas" Co., Limited, Bethnal Green, E.**  
C. T. KINGZETT, F.I.C., F.C.S., *Managing Director.*

*Friedrichshall.*

THE WELL-KNOWN APERIENT MINERAL WATER.

**IMPORTANT NOTICE.**

By reason of an improved method of caption, by which dilution is avoided FRIEDRICHSHALL WATER will be found now to be of CONSIDERABLY GREATER STRENGTH and EFFICACY than heretofore.

The ordinary dose is a large wineglassful (4 ounces) taken fasting. Most efficacious and more acceptable to the palate when heated or mixed with an equal quantity of very hot water.

"After twenty years' use I appreciate it as highly as ever."  
Professor VIRCHOW.

Of all Chemists and Mineral Water Dealers. [2]

**SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.**

SEE ADVERTISEMENT, PAGE 21.



TRADE MARK.

**"MITRE" COUGH LOZENGES.**

Sold by all the Wholesale Houses.

Manufactured for the Proprietors, J. & G. HAWKE, and supplied to the Trade by

**ALLEN & HANBURYS, LONDON.**

ELLIMAN'S UNIVERSAL EMBROCATION  
RHEUMATISM FOR LUMBAGO. SPRAINS.  
UNIVERSAL EMBROCATION  
**ELLIMAN'S**  
BRUISES CHEST COLDS  
SORE THROAT from COLD-STIFFNESS 1/12  
Prepared only by ELLIMAN SONS & CO Slough Eng.

**WOODHALL SPA**

BROMO IODINE MINERAL WATER.

*The strongest known Iodine Water in the World.*

This remarkable Spa has been purchased by a Syndicate of gentlemen who have determined to make more widely known the extraordinary curative powers of this spring, which contains more Iodine and Bromine than any spring in Europe—"And, we may safely add, in any part of the World."—*Dr. Cuffe, for many years late resident Physician at Woodhall Spa.*  
An analysis of the water having been made in November, 1886, by Professor Wanklyn, M.R.C.S., corresponding member of the Royal Bavarian Academy of Sciences, Professor of Chemistry, a very important discovery has been made, viz., the presence of Free or Elementary Iodine.  
Dr. Wanklyn says—"So far as I am aware, this is the first instance in which free Iodine has been found in appreciable quantity in a natural water. For many years the Woodhall Spa has been celebrated as a valuable remedy in skin diseases. The fact that it is a solution of free Iodine is interesting in this connection, and well worthy of the attention of the medical profession."  
The Woodhall Bromo Iodine Water is now being bottled at the Spring by the Sole Agents, BROMLEY & CO., Chemists, 233 High Street, Lincoln, 5 & 6 The Grove, Buxton, and at Woodhall. All communications to be addressed to them at the Spa, Woodhall Horncastle.

*A. W. Carter & Co. Estd 1831*  
*Soluble Essences for Mineral Waters*  
*Old Refinery Bristol*

**TO ALL WHOM IT MAY CONCERN.**

We hereby beg to notify that Dr. OTTO WITTÉ is no longer in our employ, or connected with us in any way.

Enow Hill Buildings, E.C.  
Oct. 18, 1887.

Respectfully,  
**BURROUGHS, WELLCOME & CO.**

**EDITORIAL NOTES.**

**PHARMACEUTICAL RESEARCH.**

It was in accordance with the fitness of things that Mr. R. W. Giles, the high priest of pharmaceutical research, should have undertaken to enlighten the junior pharmacists of the Metropolis on the prospects of the latest pharmaceutical development. It could not have been possible to have got together half a hundred sage men of business to listen to and discuss the advantages of research, for however great the sympathy of the old may be, it is the young to whom we must look for enthusiasm in this matter. To them research is a name, or the expression of something indefinite to be



accomplished before they can rank in the race of pharmaceutical progress. Probably Mr. Giles and the other reverend *savants* who gathered together on Thursday evening in the little room in Great Russell Street realised this fact. There may have been among them some earnest desire for the discovery of more truth; though he himself has never made any secret of his design in advocating an official research laboratory. His purposes are political. He desires to glorify the Pharmaceutical Society, and to compel the medical owners of the British Pharmacopœia to come cap in hand to the Society for information. This same spirit is as manifest in Mr. Giles's latest oration as it was when he broached the subject three years ago.

When in May, 1884, Mr. Giles first brought pharmaceutical research into the region of practical politics, pharmacy had been agitated with an attempt on the part of the Pharmaceutical Council to get pharmacists recognised in the compilation of the British Pharmacopœia. His motion and the tenor of his speech at the annual meeting of the Pharmaceutical Society were then distinctly pharmacopœial. There was a good ring about both; Mr. Giles was all for pharmaceutical progress as distinguished from purely scientific or chemical research, and the sympathy of the meeting went with him, although there were differences of opinion as to the method and policy. Policy, indeed induced the withdrawal of the motion; but there was yet a good deal of life left in the subject, and it was resuscitated fully a year later (August, 1885), when Mr. Symes succeeded in carrying a resolution in the Council to consider "the desirability of instituting a course of instruction in practical or operative pharmacy." Four months later this matter issued from the committee in two forms: one, Mr. Symes's idea, to be shelved for six months; the other, a motion for "the equipment of a suitable laboratory in which original investigation could be carried out by advanced students and others." It does seem odd that the tables should have been so neatly turned on a hard-working councillor, and that this headlong plunge should have been taken without previous discussion in council; but it is so, nevertheless. It was always Mr. Symes's motion of August, 1885, which was taken as the basis for the research scheme. The last mention of the fact was when the committee finally reported in March of last year, and submitted to the Council a scheme for the management of the research laboratory. That scheme entailed the building of a new laboratory and its equipment, the appointment of a director and assistant (if necessary), and an expenditure of "about 500*l.*" a year, exclusive of rent. The scheme was referred back to committee, and has not since been heard of, but the new research laboratory has gone on all the same. About this time Mr. Dunstan was allowed the use of one of the laboratories and received a grant of 50*l.* for research.

Mr. Giles is a healthy lecturer for young pharmacists. He often puts sound truth into striking sentences which it does one good to listen to. But it is not quite certain that he does not at times sacrifice impartial judgment for the sake of making a successful point in his advocacy. We quite agree, for instance, that the most powerful support which pharmacists in the future can obtain is more education, general as well as special; but it is far from true to represent, as Mr. Giles does, that trade unionism and political efforts on the part of the trade are always failures, and that the one centre of all our success, such as it is, is the Pharmaceutical Society. New alkaloids and standardised tinctures, too, are worthy objects to aim at in this new departure, and it is quite evident to every one that both the research laboratory and the Pharmaceutical Conference can employ their opportunities better than in "inventing spurious patent medicines;" but if the remark is intended to discourage the

publication of useful and carefully-tested pharmaceutical formulæ, we should be inclined to question its appropriateness.

Against pharmaceutical research no pharmacist worthy of the name can offer any objections. It has flourished since the time when the annals of British pharmacy were first written—Mr. Giles reserves it all for the Pharmaceutical Society—and there is no evidence that it is decaying in our midst. It is not likely to be any the worse for any gentle urging which the Pharmaceutical Society can give it by an organised scheme. It is not prudent, however, to expect too much from such organisation, because experience shows that the most important and most practical researches have been conducted by men of large experience, and we shall require the co-operation and active interest of veteran pharmacists if the work of the research laboratory is to be of use to pharmacy generally. The scheme will not start without its incubus. In the first place there has been no substantial vote upon it either by the Pharmaceutical Society or its Council. The discussions upon it show that the interest in the subject is far from being red hot, and we understand that many in the charmed circle look upon it as a "fad." It is obvious that pharmacy can annually provide only a very small number of young men who can devote the time and afford the money necessary for unremunerative work. To the Society itself the scheme will be a costly business; it will represent at least 1,000*l.* a year on a growing expenditure sheet, and this sum will, when the Society feels tight in money matters, seem too big for the glory it brings.

#### LOST POISONS.

ABOUT two years ago the Privy Council took the initiative for adding nitro-glycerine and its medicinal preparations to the schedule of poisons, by bringing the matter under the notice of the Pharmaceutical Council. We have been informed by the Inspectors of Explosives that the introduction of nitro-glycerine into the Pharmacopœia raised the question as to the conditions under which it could be made and sold by chemists, and the Secretary of State decided that it was not his intention to apply the powers under the Explosives Act to interfering with the manufacture of nitro-glycerine for *bonâ-fide* medical purposes. From the Secretary of State the matter passed into the hands of the Privy Council, with the result as stated. The Pharmaceutical Council took two months to consider the matter, and eventually drew up a list of seven articles which they deemed desirable to have added to the schedule of poisons. They also called the attention of the Privy Council to the large number of cases of poisoning by carbolic acid, and suggested the advisability of placing it in Part ii. of the schedule. The Privy Council's reply to this was that they would be willing to approve of nitro-glycerine being placed in Part i. of the schedule, but they would do nothing with the other articles named in the resolution, as the Lord-President would probably introduce "very shortly" a Bill into Parliament for further regulating the sale of poisons. In the face of this the Pharmaceutical Council did as they were bidden, and the necessary resolution was passed in May of last year, and was duly forwarded to the proper quarter. Since then nothing further has been heard of the matter, and the *Gazette* notice which would render nitro-glycerine a legal poison has not appeared. We may reasonably ask the cause of the delay. It is true that during the eighteen months' interval no death or even mishap from the use of medicinal preparations of nitro-glycerine has been reported. But what is much more serious than the neglect in this particular case is the slipshod manner of dealing with the regulation of the sale of poisons manifested in this conduct of the Medical Department of the Privy Council. It

is highly prejudicial to the safety of the public to allow a problematic Bill to paralyse existing regulations, which are sufficient to place some safeguard on the sale of carbolic acid, soluble oxalates, and other substances which are the frequent cause of death, owing to their careless handling. We do not hold the Pharmaceutical Council quite guiltless in the matter. They have their duty to perform, and they should not allow the negligence of others to thwart the completion of it. In this matter they have an excellent case, and if any show of energy on their part should be opposed by the officialism of Whitehall, the public, as well as the medical profession and the drug trade, would give them good backing.

### THE SAFFRON CROP.

THE Spanish saffron crop which has now been gathered has, according to all accounts, been an exceptionally good one, rain having fallen throughout Eastern Spain in time not only to save the crop but to benefit it materially. In the ordinary course of things a considerable decline in the price of the drug may therefore be expected, but as the article is a comparatively small one, and liable to be kept artificially at high values by speculation, it is doubtful whether after all the quotations will fall to the extent which the circumstances would warrant. In 1885 and 1886 the Spanish saffron crop, which governs the market of the article, remained much below the average, and the price has therefore risen to an abnormal figure, as much as 56s. per lb. having recently been quoted for best Valencia saffron. It must, moreover, be borne in mind that the stock left over from last season is a very small one. An average crop in Spain is estimated to produce about 110,000 lbs.; but we have heard it stated on good authority that the cultivation of the plant is extending, a statement which appears strange in the face of the fact that the field for the employment of the article is certainly not increasing. Dumesnil has calculated that it takes about 7,300 flowers to yield one English pound of fresh saffron, which by drying is again reduced to about one-fifth of its original weight. To a person of an arithmetical turn of mind it will therefore be evident that the total yearly saffron production of Spain should represent something like four thousand millions of flowers; but much of, if not nearly all, the saffron brought into commerce is more or less adulterated, most frequently by the addition of calcium carbonate and similar ponderous substances; and this calculation is therefore probably rather above the mark. But it is clear, at any rate, that the collection of the drug is a most laborious occupation, and it is scarcely a matter of surprise that the mere cost of gathering the saffron, even in a country where labour is so cheap as in Spain, should be said to be over 15s. per lb. The bulk of the Spanish saffron is brought into commerce by way of the port of Valencia, to which market it is carried from the growing districts in the provinces of Aragon, Valencia, Murcia, and Andalusia. The saffron business forms a considerable branch of trade in the city of Valencia, but the market is dominated by a few large houses. From Valencia the saffron is distributed to different quarters of the globe, Marseilles receiving the heaviest consignments. Alicante is also a centre of the Spanish saffron trade, but it has lost much of its former importance in consequence of the barefaced manner in which "loading" with mineral substances is carried on there. Alicante saffron, for this reason, is generally quoted from 30 to 40 per cent. lower than the Valencia variety. Of late years Marseilles has gained considerably in importance as a saffron market. In 1886, 51,280 lbs. saffron were imported there, while the exports amounted to as much as 59,342 lbs., two-thirds of which went to British India. The

Marseilles market has also obtained an unenviable notoriety for systematic saffron-doctoring, and it is there that the article is especially manipulated to suit the requirements of the different markets. British India absorbs the commoner qualities of saffron; that country is the largest consumer of the drug, it being a highly-priced ingredient in Hindoo cookery, as well as a valuable colouring agent in the manufacture of those textile fabrics for which India is famous. In Europe the use of saffron as a dyeing material in textile industries is now almost obsolete; but it is still largely used as a colouring matter for confectionery and other foodstuffs, as well as in the manufacture of liqueurs and gold-lacquer. Bird-fanciers also use it to some extent, believing it assists the birds in moulting. It enters into seven B.P. preparations, the principal of which are tincture of rhubarb, compound decoction of aloes, and Huxham's tincture. The colouring power of saffron is said to be so great that one single grain of the drug, rubbed up with sugar, is capable of giving a yellow tint to ten gallons of water.

A fine variety of saffron is produced in the French district of Gatinais, near Orleans, but in all probability only a very small part of the saffron sold under that name is really of French growth. The total yield of Gatinais saffron is said to average about 7,000 lbs. per annum, yet French official statistics show that in 1886 alone no less than 70,634 lbs. of saffron declared to be of *French growth* were exported from the country, the greater part to Germany. In Austria some saffron was formerly cultivated, but the industry has apparently been abandoned, as it had become unremunerative to the farmers. It is, in fact, the principal obstacle to saffron-growing that the cultivation of the plant requires such immense care, and the growing crop is so easily damaged, while on the other hand the yield is so comparatively small that the cost of production must always remain too high to admit of any large extension in the use of the article. In Italy saffron-growing is said to be reviving, and about a year ago we had occasion to inspect some very fine specimens of saffron raised in that country. Beautiful saffron grown in Ceylon was also exhibited at the Colonial and Indian Exhibition, and it seems strange that more attention should not be paid to the cultivation of the drug in that island, as well as in other parts of our British Indian possessions (where it is known to succeed well), considering its extensive employment in India in the arts and for domestic purposes. A bulky treatise might be written on the various modes of adulteration practised on saffron and the tests recommended for the detection of these sophistications; but the best *prima-facie* evidence of the genuineness of a sample is certainly that the three stigmas of the crocus, which form the saffron proper, should be found united at the base, as in nature. In the middle-ages the adulteration of saffron was a capital crime, and in the middle of the fifteenth century several people in Germany found guilty of that offence were buried alive or burnt at the stake *pour encourager les autres*.

### TONQUIN AND THE DRUG TRADE.

THE territory of Tonquin, which has recently been incorporated into the dominions of the French Republic, is no doubt destined to take an important rank among the countries whence our drug supplies will in future be derived, and where articles of European manufacture are to find an outlet. The consumption of Western pharmaceutical preparations in Tonquin proper, and in Annam, is not, perhaps, likely to be very important just yet; but the country will certainly acquire considerable importance as soon as Southern China is fully opened up to European trade, an eventuality which cannot be delayed much longer.

When the French first settled in Tonquin such European articles as were then used by the natives were almost entirely of English and German origin, and both this country and Germany largely extended their trade during the first few years of the French occupation. The natives took kindly to articles of European manufacture, and M. Paul Bert, who, about two years ago, was appointed governor of the French Indies, was far-sighted enough to encourage the introduction of European goods of whatever origin into the newly acquired province. It was his intention to gradually accustom the natives to the use of European manufactures, and when once the latter had become necessities to the Tonquinese, to displace them gradually, through a system of differential duties, by goods of French manufacture only. But Paul Bert fell a victim to the Tonquin climate, and his successor, aided by the commercial chauvinism now prevailing in the mother country, has quickly reversed his policy. Tonquin is henceforth to be turned into an exclusive market for French manufacturers, all foreign goods being shut out by the operation of a customs tariff on articles not imported directly from France or certified to be of French origin. Thus, French medicines will enter the country duty free, while German, English, and others have to pay an *ad valorem* duty of 10 per cent. Foreign goods imported into Tonquin for transit to China will only be subject to one-fifth of the usual duty; but even this reduced tariff will probably have the effect of driving the Chinese transit trade from Tonquin to British Burmah—a province which rivals Tonquin as a way to the markets of Southern China, and where, under the British fiscal system, no impediments whatever are likely to be placed in the way of the transit trade. The decree establishing customs duties on foreign goods entering Tonquin came into operation last month, and had the immediate effect of causing many foreign vessels arriving in the Tonquin ports to return without discharging their cargo, exporters finding it more advantageous to pay the carriage back, or to send the goods to other ports, than to pay the duty suddenly imposed in the French possessions. Meanwhile, the policy of forcing French products upon the natives proceeds apace. An exhibition of French products has recently been held at Haiphong, the principal port, at which French manufacturers of pharmaceutical and surgical articles, perfumery, soaps, and paints were strongly represented. The total imports into Tonquin in 1885 were worth, in round figures, 867,200*l.*, and in 1886 they rose to 1,152,320*l.*; but during the present year, owing to the new protective tariff, they will probably show a great falling off. In 1886 barely 23 per cent. of the imports was of French origin, the remainder being nearly all British, German, and Indian. French imports consist mainly of toys, preserved foods, spices, oils, liqueurs, perfumery, ironmongery, tobacco, and wines. All important articles, such as cotton goods, woollens, &c., are of foreign origin. Eighty-five per cent. of the total import of cotton fabrics comes from Bombay, the rest from Great Britain. Part of the imports only are used in the French possessions, a large proportion being re-exported on mules to South-Western China. Among the principal drugs produced in the French Indo-China are indigo, turmeric, sapan wood, star-anise, annatto, cocoanut oil, gamboge, cassia, ginger, pepper, galangal, benzoin, tamarinds, and China root. If the country should continue a French possession, and the development of its resources proceed quietly, the export of these articles will doubtless receive a considerable impetus, to the detriment of the London drug market, for the commercial policy now followed in France renders it almost certain that all the French-Indian produce will be shipped to French ports, and thence distributed over the continent. Cassia lignea is mostly grown in Annam; the bulk of it is now ex-

ported *via* China, and the industry is described as capable of great development. Star-anise is very largely gathered in the neighbourhood of the town of Langson. As a rule, the fruit contains twelve seeds, but the six-seeded fruit, which is especially confined to the Langson district (and which, by the way, is that usually seen on the London market), is most esteemed on account of its greater richness in essential oil. Hanoi has been the centre of the anise trade, from time immemorial, but since the French conquest the market has shifted to Hong Kong. An idea of the importance of the industry may be gathered from the fact that nearly two hundred distilleries, belonging to Chinese, were at one time in existence at That-Khé and Dong-Dan; but they have been all closed in consequence of the war. Star-anise oil is largely used in France as an ingredient in the manufacture of absinthe and liqueurs. Indigo flourishes exceedingly well in Tonquin; its colour is of a greener shade than that from Bengal and Guatemala, but by careful cultivation the quality might be greatly improved, the native system of treating the plant now in vogue being very imperfect. Indigo is cheap in Tonquin, medium quality being worth about 2*s.* 6*d.* per lb. at Haiphong. It is said that a wild variety of indigo, called "China green," is much esteemed in Annam, where it realises seven times the price of ordinary indigo. Turmeric root is sold in finger and bulb form, and also as an extract, in which latter condition it contains about 20 per cent. of water. Sapan wood, which yields a dye much esteemed throughout the East, is found in enormous quantities in the wild districts bordering upon the principal rivers. In the neighbouring state of Siam the wood is carefully cultivated and preserved, but in Tonquin the industry has hitherto been entirely neglected. Sticklac, of which two crops are annually gathered, abounds in the north-western part of Tonquin, near the Chinese frontier, and under European supervision a large shellac industry might be established. In order to create a demand in Europe for the drugs produced in Tonquin, a large collection of samples of known and unknown plants, said to possess medicinal properties or thought to be useful as dye-stuffs, has been forwarded to France and divided among the principal chambers of commerce in that country. In 1885 the total exports of French Indo-China amounted to 344,080*l.*, and in 1886 to 364,480*l.* The opium trade in Tonquin is also of very considerable importance. The best qualities of opium used are drawn from British India, but about 19,000 lbs. of an inferior quality were imported in 1886 from the Chinese province of Yunnan.

Among the many wonderful inventions of the age, the one which Mr. Thomas Christy, the improved Mothers. wholesale druggist, of Lime Street, has just perfected will surely take the cake. The official journal of the Patent Office records an application, entered during the past month, by that gentleman for a patent for "Improvements in rearing-mothers"! We were not previously aware of any marked defects in the mothers; but we shall no doubt appreciate these when we have had some experience of the Christy patent. There are many points, however, in which the offspring can be mended, and we hope Mr. Christy will now turn his attention to them.

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In a second letter to the *Innische Mercur*, Over-production of Cinchona. Mr. Von Winning, whose observations on the profitability of cinchona-growing we quoted last week, urges planters to pay greater attention to the harvesting and sorting of the bark, and maintains that the present depression of the quinine market is largely, if not principally, owing to the foolish habit of the growers to ship the largest possible quantities of bark, utterly regardless of alkaloidal strength. The principal sinners in this

respect, according to Mr. Von Winning, are the Ceylon planters; but the evil has now spread to Java, and may, unless speedily checked, bring about the complete ruin of the cinchona industry. It is pointed out that frequently the London market has declined merely upon the strength of telegrams from Colombo announcing the shipment of heavy quantities of bark, although the alkaloidal richness of the parcels was entirely unknown. This is the best proof how great a factor in the market position are the mere quantities shipped. If the Ceylon planters, two years ago, had resolved to simply leave unharvested all varieties of bark known to be so poor that they could not be expected to realise more than freight and charges, the pressure of dead bulk upon the market would have been so much lessened that all other barks would probably have been worth double the price they fetch now.

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Alleged American Wholesale Druggists. A case is now being tried before the New York courts which has caused quite a sensation among the American drug trade. It is a criminal action brought by Mr. E. Merck, the German chemical manufacturer, against Messrs. Lehn & Fink, one of the principal firms of wholesale druggists in New York, who are accused of counterfeiting Mr. Merck's labels and trade-mark. According to the *O. P. and D. Reporter*, Mr. Merck, owing to the frequent complaints which he had received from America respecting the quality of his chemical preparations, caused his representative in the States to institute a thorough inquiry, which resulted in an allegation that Messrs. Lehn & Fink were printing imitations of Merck's labels and putting up other goods than Merck's with these labels on the bottles, and also that they tore off the labels from packages containing Merck's goods and applied the former to counterfeit articles. Acting under legal advice, Mr. Merck obtained a search warrant against Messrs. Lehn & Fink, and inspected the premises of the latter, when a large quantity of alleged counterfeit labels and bottles, as well as a number of genuine labels, said to have been forced off the original packages of Mr. Merck's goods, were seized. Two of the partners in the firm of Lehn & Fink and one of their employes were thereupon arrested, but afterwards liberated on bail pending the magisterial investigation of the case. Messrs. Lehn & Fink entirely repudiate the charge made against them. They used to act practically as Merck's agents in the States, and were in the habit of buying between 5,000*l.* and 6,000*l.* worth annually from him; but at the commencement of this year Mr. Merck sent one of his own employes to America to act as his representative. The case was still *sub judice* at the time of the latest American mail advices.

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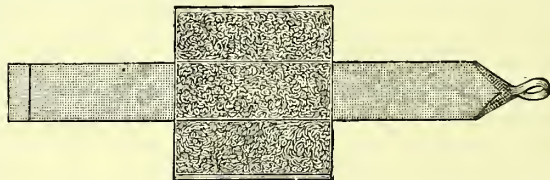
Coowaree Seeds. At the last drug sales 15 bags of pale coffee-coloured seeds, cylinder shaped, and about  $\frac{1}{8}$  in. in length, the ends being somewhat oblique, were offered for sale. No one appeared to have the slightest idea of their use, and the lot, altogether about 22 cwt., was withdrawn. The parcel was imported here from Bombay, and we understand that the seeds have been identified by Mr. Holmes as the seeds of *Cassia tora*, Linn., or oval-leaved cassia, called *Kukul* by the Arabs and *Peti tora* by the natives of Ceylon. The shrub, which attains a height of about 5 feet, grows in most parts of British India, and is extensively cultivated by the natives for the sake of its leaves, which play an important part in Hindoo pharmacy. It also grows in Japan, and has been found in Central America by Houstoun. In Cochin China, also, it is very common, but in the latter country it does not seem to rank among the medicinal plants. The *Cassia tora* seeds, ground with sour huttermilk, are occasionally used as a cure of itchy eruptions; but the leaves, which are strongly mucilaginous and of a highly disagreeable odour, are a household remedy among the Hindoos. In the form of a decoction they are given to children during teething, fried in castor oil they are used as a cure for foul ulcers, and finally, rubbed up with lime juice, they form a popular remedy for ringworm. For the latter purpose, and in a similar manner, the root is also used. In Western India a blue dye is also made from the seeds, in combination with *Nerium tinctorium*, Roxb. The seeds have been imported into this country before now, but it does not seem that there is any demand for them.

Australian Bismuth. Our Australian correspondent writes:—A report spread abroad that Mr. W. A. Hills, of Marrickville, N.S.W., representative of the Newcastle-on-Tyne Smelting Works, intended to ship to England from a new mine at Gumbh, near Molong, 25 tons of bismuth, has drawn forth an emphatic denial from that gentleman. He states that such a consignment would utterly swamp the market, and the announcement might cause considerable dismay to shippers of the metal. The annual report of the Department of Mines of New South Wales states that at the Kingsgate Mine, in the Glen Innes Division, once the only mine in the colony, an average of about thirty men and boys have been at work, and the output, according to the returns of ore forwarded to Newcastle (the port) by rail, has been 82 tons 12 cwt. 2 qrs. 15 lbs. This at the rate of 250*l.* per ton (the ore being averaged at 50 per cent.) gives a total value of 20,656*l.* 5s. Some doubt is thrown on these figures by statements published in other parts of these reports. A return showing the quantity and value of minerals produced in the colony during the last ten years shows that bismuth was first produced in 1881, when 12 tons 10 cwt., valued at 2,728*l.*, was produced. The amounts and values for succeeding years were—1882, 2 tons 14 cwt., 162*l.*; 1883, 3 tons 14 cwt., 650*l.*; 1884, 14 tons 17½ cwt., 2,770*l.*; 1885, 14 tons, 3,700*l.*; 1886, 20 tons 18 cwt., 3,870*l.*

## Notes of Novelties.

### HOIHERSALL'S TOWELS.

MESSRS. S. MAW, SON & THOMPSON are at present introducing a new kind of towel for ladies and children's use. They are in two shapes, but the material in both cases is the same, viz., a soft and remarkably absorbent cotton yarn, which is woven so as to present a surface like Turkish towel-ling. This surface has been found to be the best for preventing chafing of the skin. The ladies' towels, "Sanitas," are in the following form; the inner portion is here represented



unfolded. The "Sultana" squares are for ladies and children, and are much more suitable than either cotton or linen diaper. The material from which these towels are made has been rendered antiseptic, and is said to retain its virtue after washing. Chemists would do well to bring these novelties under the notice of doctors and nurses.

### PASTA MACK.

"PASTA MACK" is the name of a new preparation for bath and toilet use brought into commerce by Mr. H. Mack, of Ulm, in Bavaria. The preparation, which apparently contains bicarbonate of soda among its ingredients, is sold in boxes of eight tablets each. About half a tablet thrown into a bath suffices to impart a highly agreeable odour—not only to the water, in which it immediately dissolves, causing slight effervescence, but to the bathroom also. The tablets will no doubt become highly popular with ladies as a toilet ingredient, and the approaching Christmas season ought to give an excellent opportunity for introducing the novelty. Pasta Mack is put up in extremely tasteful boxes, much more artistically executed than is usually the case with German specialties. Messrs. Osborne, Garrett & Co., of London, are the English agents for the preparation.

## FRENCH DISPENSING.

IN order to give some practical ideas of dispensing in a French pharmacy, the writer has selected one hundred consecutive prescriptions occurring during the week's work. In this number we find 33 potions (mixtures), 1 suppository, 9 powders, 5 drops, 5 *solutés* (solutions), 1 inhalation, 4 *collutoires* (collutoria), 9 *ommades* (ointments), 10 syrups, 3 hypodermic injections, 7 *cachets*, 4 liniments, 3 pills, 2 wines, and 4 *mélanges*.

The Codex gives some general directions to be observed in the preparation of potions. All powders, vegetable or mineral, it directs, should be divided by the syrup or gum which may be prescribed. Kermes mineral, which is frequently occurring, should be well triturated with sugar before the addition of the other ingredients, and all volatile substances, such as ethers, should be added finally. Our first prescription containing this substance illustrates the difficulties of the dispenser, and also, what is of far greater importance, the general inaccuracy of the French system. It runs thus: Kermes mineral, 0.10; gomme arabique, q.s.; eau distillée, 150 grammes; teint d'aconit, 6 drops; sirop diacode, 30 grammes. Frequently this would be dispensed without gum, as the quantity of powder is so small. The uncertainty as to the use of the gum is troublesome, and so is the quantity of tincture, as drop-measures are unknown. Referring to the Codex, we find that the normal drop-measure should be a glass tube with a capillary opening, having an outside diameter of 3 millimetres, capable of giving drops of distilled water of which 20 will weigh 1 gramme. Practically these tubes are in very little use, the rough-and-ready practice of dropping from the bottle being much more prevalent—in fact, in a large dispensing business it would be difficult to find the time to do otherwise.

The last prescription, however, has the advantage of equalling by weight exactly the contents of a 180-gramme bottle, or about an ordinary six-oz. English bottle—a circumstance for which the dispenser is always thankful. The next presents a dilemma in that respect: Teint d'aconit, 5 drops; teint de belladonne, 1 drop; syrup of orange flowers, 40 grammes; eau distillée, 30. In this case a 60-gramme or 2-oz. bottle will not contain the exact weight; it has, however, been dispensed to fill both a 2-oz. and 3-oz. bottle—which makes an important difference in the dose of one teaspoonful every half-hour, and also in a 3-oz. bottle, not filled, but containing the exact weight, which an English dispenser would regard as the only correct course. But then occurs a commercial trouble. The customer complains that the bottle is not full, and that in other pharmacies this has not been the case, and he gets the impression either that he is cheated or that a mistake has been made. Moreover, it may be mentioned that our bottles are really remarkable for their inaccuracy; taking twelve bottles marked 180 grammes, perhaps one in the twelve on weighing will be found accurate, the others differing from 5 to 20 grammes. This inaccuracy is especially noticeable with those turned out from the Lyons glass-factories.

Another example: Extract quinquina, 1 gramme; cognac, 2; julep gommeux, 130. This mixture has been sent out both in 4-oz. and 5-oz. bottles. Many dispensers take the precaution to note the exact size of bottle in the prescription-book, so as to secure uniformity. Mixtures containing tinctures or other liquids in the quantity of 1 gramme, or even 2 grammes, are another fruitful source of discrepancies, as practically so small a dose cannot be weighed accurately into a 6 or 8 oz. bottle in an ordinary pair of counter-scales. The Codex offers some assistance with a table, showing the numbers of drops contained in 1 gramme of such preparations as are most frequently prescribed; but this is not of practical service, as accurate measurement of drops involves a great loss of time. In this table the number of drops to a gramme varies from 20 of distilled water to 90 of sulphuric ether. The dispenser very soon falls into the usual system of adding these ingredients more or less "à l'œil."

Whilst on the subject of mixtures we note the absence in French prescriptions of a safeguard which often prevents mistakes in England. In the majority of cases French prescribers give no directions on the prescriptions as to how the medicine is to be taken. When given the directions are not unfrequently shamefully vague. "Take by spoonfuls" occurs

constantly without indication whether tea, dessert, or table spoons are intended. A consolation for the pharmacien is that French remedies are generally very innocuous, and the quantity taken is not of so much importance.

Suppositories also give rise to many uncertainties. The standard weight, according to the Codex, should be 4 grammes, but the following prescription orders cacao butter, 3 grammes; ext. opium, 0.03; ext. belladon., 0.01; camphor, 0.30 in each suppository. Moulds as used in England are unknown in this country, and their place is roughly supplied by extemporaneous paper cones, which require some practice and dexterity to produce of the same size, so as to obtain suppositories of uniform length and diameter. It is almost certain that no two pharmacies will turn them out in identical style. Suppositories before delivery to the customer are always covered with tinfoil—for what purpose it is difficult to say, as the patient has the trouble of unwrapping each one before using. While on this subject it may be noted that where metallic moulds are in use the practice of wiping them over with soap liniment is far preferable to the use of oil to prevent adherence of the suppository.

Powders, as a rule, are dispensed in as small a compass as possible, and many pharmacien use powder-papers already folded, with their name and address thereon. This system offers the advantage of uniformity and neatness, not always obtainable by handwork. The papers are made both in ordinary and in waxed paper, the latter being employed for iodide and bromide of sodium and other salts, which are frequently prescribed as powders. The following is an ordinary prescription for powders:—Calcined magnesia, 0.20; nitrate bismuth, 0.20; pancreatine, 0.10; pepsine, 0.10; prepared chalk, 0.15; opium, 0.01. For one powder; send twenty such. The price usually charged would be 2s. 6d. Powders are often prescribed in bulk, as the following:—Carbonate iron, 10 g.; Peruvian bark, myrrh, liquorice, of each 15 g.; to be taken by teaspoonfuls. These are usually dispensed in card board boxes, very seldom in wide-mouth bottles, unless at the special request of the customer.

Drops offer no feature of special interest, as they do not appear to be a popular form of prescribing, and are almost confined to arsenical preparations and such tinctures as nux vomica, ignatia, &c. These are generally dispensed in stoppered bottles fitted with a capillary tube, or stoppers with a groove and lip, or, when it is a question of price, in an ordinary phial, with a separate drop tube, at a cheap rate. Collutoires, or applications for brushing out the throat or mouth, usually have for a base mulberry syrup, honey of roses, or glycerine, with about 10 per cent. of some active ingredient, such as pot. chlor., borax, &c. The quantity usually ordered is about 1 fluid oz., which is sent out in a wide-mouth phial sufficiently large to admit a camel's-hair brush.

The dispensing of ointments differs little from English procedure, and the formulæ do not, as a rule, present any novel features. Lard as a base is becoming discarded for vaseline and lanoline. The preparations most in use are mercury, iodine, and zinc; turpeth mineral occurs as an ointment of 1 part in 30; also sulphate of copper. Ung. belladonnæ is a great favourite with French prescribers, and occurs in all sorts of combinations, such as the following:—Ext. bellad., ext. opii, of each 1 gr.; ol. menth. pip. gtt. v.; glycerinated lard, 20 gr. The English style of covered pots for ointments has never come into use, but they are usually sent out in gallipots covered with tinfoil and paper or circular discs of cardboard. Recently screw-capped jars with nickel covers have found a place on the dispensing-counter, and from their convenience and low price will soon supersede the antiquated style of package.

Syrups form the real base of French pharmacy. The Codex gives the formulæ of 80, all more or less in daily use, and the non-official may be reckoned at some 600, all of which occur more or less in prescriptions. Sirop de limaille de fer (syrup of iron-filings) is a specimen of the more unusual ones. Here, again, discrepancies occur. The instructions of the Codex are seldom followed, as most pharmacien prepare even the official syrups from fluid extracts. The products differ widely from the original type, especially as the admixture is frequently made out of economical motives, to avoid keeping stocks of perishable preparations. In fact, the dispensing of syrups in France is exactly parallel with that of infusions in England. It is certain, however, that this system of dispensing has told against the phar-

maccin; many physicians prefer to prescribe the syrups of well-known specialists—such as Laroze, Chassaing, &c.—rather than risk the home combinations of the dispenser. Prescriptions for specialties simply are becoming more and more common. For instance, the following:—One hottle digitaline (Homolle), 1 granule every two days; 1 bottle eau Gazost, as directed; 1 tin meat powder (Rousseau), a teaspoonful twice a day; 1 tube quassine (Burgraeve), 1 granule at each meal. In this case nothing is left to the skill of the dispenser, but his loss of profit is very considerable. It is probable, however, that much of this has been brought about by bad work. Glucose frequently forms an important item in syrup dispensing.

Cachets, or small concave discs of wafer paper enclosing a medicinal dose, are distinctive, and deserve to be more generally adopted. Patients like them, and they afford a good profit to the chemist. Limousin's apparatus for filling and closing the cachets is not equal to that of Digne, of Marseilles, either for simplicity or celerity. This latter is now generally adopted. An example runs:—Pancreatine, maltine, bismuth, prepared chalk, of each 0.25 centigr. For one cachet; send twenty. The price would be 5s. Cachets are sent out in cardboard cylindrical cases of different diameters, according to size, from 0 to 3, containing from five to twenty. For the exhibition of powders, salts of quinine, &c., nothing can be better adapted than this plan, which has in many instances replaced the use of pills and powders. Cachets of quinine, bismuth, rhubarb, and other popular remedies are very generally kept ready prepared. Extracts are also prescribed in this form, as in the following formula: Ext. cinchonæ, 0.15; quinae hromid., 0.10; sodæ salicyl., 0.15. Make one cachet. It is customary to mark on the prescription the size of the cachet employed so as to secure uniformity.

Liniments are now generally dispensed in blue glass phials with distinctive red labels. The formulæ for liniments at times are very curious, as will be seen from the following:—Tinct. digitalis, tinct. scillæ, tinct. scammonæ, of each 15 grammes. Eau de vie de lavande, 300 grammes; sulfate de quinine, 2 grammes. Ol. hyoscyami, 200; canphor, laudanum (Rousseau), ext. helladon., chloroform, of each 4; ft. lin. The most frequently prescribed appear to be baume opodeldoc (similar to Steer's), baume tranquille, or baume floralenti as a hase, in conjunction with sedatives.

Pills are certainly going out of fashion, aperients being very seldom ordered in this form, nor can special pills be said to have any really popular demand. Mineral waters, such as Hunyadi Janos, Royale Hongroise, &c., have driven pills out of the field, much to the dispenser's loss. The cheap screw-capped pill tubes have superseded the old paper box, and are much adopted by specialists; turned wood boxes appear never to have been worth making by French sundriesmen, the few met with being evidently of English origin. Some of the pill formulæ are surprising, and being frequently without any directions for taking are certainly trying to the nerves of the dispenser—*e.g.*, Atropine, 5 milligrammes, conf. rosæ, qs. to make five pills. Veratrine, opium, of each 0.05 centigrammes; ft. pil. j.; mitte xxx. In this case, as the prescriber could not be consulted, the quantity of veratrine was changed from 5 centigrammes to  $\frac{1}{2}$  centigramme. Quassine crystal, 0.002 milligrammes; strychnine,  $\frac{1}{2}$  milligramme; sulf. quinine, 25 milligrammes; ft. pil. j.; mitte vj. Ext. cinchonæ, 0.10; ferri lactas, 0.03; ferri sodæ pyrophosph., 0.02; p. ergotæ, 0.02; ft. pil. j.; mitte 50. The time and care required for such preparations are never compensated by the price obtained. As a powder for rolling pills lycopodium is almost always employed, except when the pills are directed to be sent in iris or cinnamon powder, which happens occasionally; silvering is becoming a thing of the past.

Wines are a favourite form of administration, and are usually prescribed by hottle or half-bottle; but in this case, as in so many others, proprietary articles are preferred. As examples of wines prescribed take the following:—Vin de quinquinæ au Malaga, containing in every 100 grammes 10 drops tinct. nux vomice, send  $\frac{1}{2}$  litre; or vin cinchonæ, 1 litre; ferri et sodæ pyrophosph., 2 grammes. These are usually dispensed in special-shaped hottles and capsuled.

Mélange is a word frequently employed to head the label of a preparation, and it is somewhat difficult to classify, as the following specimens will show:—Old rum, 150; creasote, 5; glycerine, 20; suivant avis (as directed). Honey, 15; extract

of arnica flowers, 15. Mix. Iodoform, 1; aq. rosæ, aq. destil., of each 50; tinct. opii, 1. Mix.

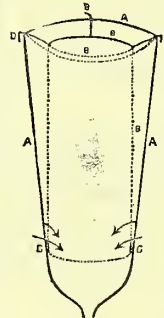
Occasionally such prescriptions as the following crop up:—Sulph. magnesia, rose leaves, sarsaparilla, fumitory, china root, liquorice root, agaric (*Boletus laricis*), senna, and soapwort, of each 1 oz.; infuse for twenty-four hours in 4 litres of boiling water. This involves thoroughly cutting up or disintegrating the whole of the materials, so as to produce as uniform a compound as possible. The price charged was 5s. This would be given to the patient either in a paper bag or cardboard box, according to circumstances. Packets of different preparations for infusions are frequently ordered, besides tisanes, or teas, to be drunk between the medicinal doses. Here is an example:—Quassia, 16; roasted coffee, 32. Divide into eight packets as directed.

#### A "MACERO-PERCOLATOR."

THE figure represents a form of percolator of which Mr. Adolph Reich communicates a description to the *Western Druggist*. The outer figure represents a glass percolator of any desirable size. B (the dotted line) is a perforated cylinder, which is held in position at G by a wedge-shaped rubber ring, and rests at D on three or four pivots, the rubber ring being pulled over the bottom of cylinder. In proceeding, the directions of the U.S.P. are followed. Moisten

and pack the powdered drug in the perforated cylinder, and then pour enough of the menstruum on top to saturate the drug and leave a stratum above it; let stand twenty-four hours or longer, according to the nature of the drug. All the extractive matter will gravitate to the bottom of the cylinder, and the lighter menstruum will be buoyed up and again sink until the whole menstruum is impregnated and saturated. On taking out the cork all the menstruum will have to pass out as indicated by the arrows. Should there be any extractive or colouring matter left, repeat the operation, or to get out the alcohol (as in ginger) pour some water on top; by this process it is possible to do away with the tedious process in making fluid extracts of waiting until no more colouring matter passes out, thus obtaining with the smallest possible quantity of menstruum the desired result.

[Different kinds of apparatus, similar in construction to the above, have been long in use. In fact the modern percolator is an improvement upon those more or less on this principle of circulatory displacement. For dilute extractions it answers admirably, but where concentration of volume is the chief desideratum, as in the preparation of fluid extracts, it possesses no advantages.—Ed. W. D. The apparatus seems more suitable for the B.P. method of maceration and percolation.—Ed. C. & D.]



#### LIME-JUICE CORDIAL.

	Oz.
Glucose ... ..	4
Syrup ... ..	16
Lime-juice ... ..	16
Water ... ..	28

Tincture of lemon-peel, triple orange-flower water, of each enough to flavour. We give another formula, which is highly recommended:—

Glucose ... ..	36 lbs.
Cane sugar ... ..	108 "
Water ... ..	28 gallons
Lime-juice ... ..	17 "
Oil of orange... ..	4 drachms
Oil of nutmeg ... ..	4 "
Salicylic acid ... ..	2 oz.

Dissolve the glucose and cane sugar in the water, add to the solution the lime-juice, the essential oils, and the salicylic acid, mix well, and strain.

## Trade Report.

*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

42 CANNON STREET, E.C., October 27.

SINCE our last report the drug and chemical markets have been thoroughly inactive, and complaints are made on all sides of the paucity of orders in what is usually one of the busiest periods of the year. All the public sales held this week have been more or less disappointing to those who are anxious to see prices advance. The cinchona sales resulted in a serious decline. Shellac was quiet at the auctions, although since then the market has become firmer. Turmeric went cheaper, but China galls have slightly improved, cutch and gambier remaining firm. Spices are easy or lower all round. At to-day's gum sales East Indian gum arabic sold lower in most instances. Damar, sandarac, and olibanum were neglected. Kowrie and animi showed no alteration. In drugs very few alterations of importance have taken place. Chamomiles and insect flowers are unaltered. Saffron will probably be cheaper now. Ergot is already decidedly less steady. Caraway seed is also tending lower, but senega root, cubebs, menthol crystals, and Japan wax are worth more money. Fine chemicals are quiet. Second-hand quinine has sold cheaper again, cocaine is quiet, citric and tartaric acid dull. Soda crystals and bleaching powder arc very firm, and in good demand; so also is cream of tartar.

ACID (CITRIC).—There has been a little more inquiry during the week, but the market closes quietly at 1s. 7½d.

ACID (OXALIC).—Holders are firm at 4d. per lb., but business is extremely restricted. *Sal acetos* quiet at 6d. per lb.

ACID (TARTARIC) is neglected and in a depressed condition at 1s. 6½d. per lb. for foreign. English nominally 1s. 7d. per lb.

ALUM steady and in fair request at 5l. 7s. 6d. for lump, and 6l. for ground alum in bags.

AMMONIA COMPOUNDS.—In *Carbonate* there is but very little business doing; the price is 4d. per lb., less a heavy discount. *Sal ammoniac* quiet at 34s. per cwt. for first and 32s. per cwt. for second quality. In *Sulphate* the market is lower at 11l. 7s. 6d. for grey 24s. per cent.; Hull, 11l. 2s. 6d.

ANISE.—The demand is very lively, but prices of *Russian* seed show no alteration, from 22s. to 24s. per cwt. being still the quotation. *Spanish* seed is tending higher, and good to fine Alicante is held at 50s. to 55s. per cwt. *Italian* steady at 38s. to 42s. per cwt.

ARGOL.—Three casks *Australian* argol, recently arrived from Sydney, were offered at Tuesday's public sales. Two of these found buyers, fair quality at 80s., dull grey at 73s. per cwt. Of 33 bags *Cape* argol, 30 sold with good competition at 78s. to 78s. 6d. for good but very dusty pale, 71s. for fair red and 66s. to 69s. for dusty ditto.

ARSENIC.—A fairly good business has been done. Prices are 11s. 3d. to 11s. 6d. per cwt. for white powder.

BLEACHING-POWDER is very steady at 8l. 15s. per ton ex warehouse, with good inquiry. In the North of England the markets are very firm, and contracts for delivery over the whole of next year are being made. On the Tyne 7l. 15s. is quoted.

BORAX is rather dull; second-hand parcels are quoted at from 26s. 6d. to 28s. per cwt. for foreign.

BROMINE.—No change in the market. English *Potassium bromide* is quoted at 1s. 7d. per lb. nominally.

CAMPHOR (CRUDE) remains very firm at 67s. 6d. to 70s. per cwt. for *Japan* on the spot. *China* has changed hands at 64s. per cwt. reweight on the spot.

CANARY SEED.—Notwithstanding the large imports of *Turkish* seed, the market has been quite active, and prices

remain firm. The arrivals here and at Liverpool have been over 4,000 bales, of which, however, only half were for sale, the rest having been sent merely to be transhipped to foreign ports on account of previous direct sales. There are further quantities afloat from Turkey, and offers for future shipment at a slight reduction against current values are in the market. Meanwhile the produce of other countries is entirely neglected. Of *Morocco* seed considerable quantities are still in store, for which holders ask 48s. to 50s. per 464 lbs., without finding a market. Compared with fine *Spanish* seed at 52s. to 54s., the former must appear much too dear in proportion. New *Spanish* seed will probably be cheaper still, as there seems a fair quantity offering, and the general supply of hold seed has so rapidly increased during the last three years as to be greatly in excess of the demand. *Dutch* seed is now obtainable at 50s. to 52s., but meets with no sales; its colour is anything but attractive this season. The price of ordinary to fair *Turkish* seed is—in London 43s. to 44s., in Liverpool 40s. to 41s., finer grades 45s. to 47s. per 465 lbs.; at the spice sales 42s. 6d. per cwt. was accepted for 15 quarters.

CARAWAY SEED.—Arrivals have been plentiful since our last report, and the position of the article is less firm. There are now sellers of *Russian* caraways at 22s. to 23s. per cwt., and of *Mogadore* at 25s. per cwt. *English* seed is held at 28s. to 29s. per cwt. and for *Dutch* the same prices are asked.

CASSIA LIGNEA.—The forced sale of 2,593 boxes at auction caused a further decline in the value of this article. Good realised 22s. per cwt. (one lot 22s. 6d.), and sea-damaged 19s. to 19s. 6d. per cwt.

CHILLIES steady, but without material change. At auction, 392 hales *Zanzibar*, out of 411 catalogued, sold at 25s. to 27s. 6d. per cwt. for dull to good bright red.

CINCHONA.—A further sensible decline in values was experienced at the public auctions on Tuesday, when 3,550 packages were offered for sale. Of this number 824 were *American*, mostly *Cuprea*, and these were bought in, not meeting with the slightest attention. An odd parcel of 788 bags Ceylon chips, badly damaged and altogether undesirable, alleged to be salvage, was sold at 2d. to 2½d. per lb. There was very little demand, and although holders succeeded in selling 1,100 hales Ceylon bark out of the 1,442 catalogued (not including the "salvage"), they had to be content with a price at which the unit did not surpass 1½d., and frequently sank as low as 1¼d. The best parcels were sold at comparatively the lowest rates. The following prices were paid:—

CEYLON BARK.—*Succirubra*, dust or siftings, 1d. to 2d.; chips, 1½d. to 4d.; spoke shavings, 2½d. to 4½d.; root, 2d. to 4d.; renewed, weak to fine rich, 2d. to 7d. *Officinalis*, branch, 2d.; chips, 2½d. to 4½d.; spoke shavings, 4d.; root, 6d. to 8d.; renewed, rich shavings, 9½d. to 10d. *Hybrid*, chips, 2d. to 3½d.; root, 3½d. to 5d.; renewed, 5½d.

INDIAN BARK, of which the assortment was a very good one, and consisted of 285 hales from Mysore and the Wynaad. *Succirubra*, branch, hold, 2½d.; quilly chips, 3d. to 5d.; root, 4d.; renewed, 4½d. to 7½d. Madras Neilgheri crown, shavings, 3½d.; renewed, 6d.

JAVA BARK.—202 packages of direct import found buyers as follows:—*Ledgeriana*, branch, 1½d. to 5d.; quilly chips, 2d. to 4½d.; root, 3½d. to 7d. *Officinalis* and *Hybrid*, root, 6½d.; shavings, 6d. to 6½d.; quill, long but dull and mossy, 11½d. to 1s.; bright silvery druggists', 1s. 4d. per lb. Official returns give the following figures relative to the exports of cinchona from private plantations in Java during the first half-year of 1887, as compared with the corresponding periods of the two preceding years:—

Exported to	January 1 to July 30		
	1885	1886	1887
	Kilos.	Kilos.	Kilos.
Holland .. .. .	174,075	341,587	234,704
United Kingdom .. .. .	25,573	80,794	40,036
Other countries .. .. .	96	—	—
Total .. .. .	199,744	422,381	274,740

These figures show that, as compared with the first half-year of 1886, the exports of bark have declined by 35 per cent., but that while the proportion of bark shipped to London has fallen fully 50 per cent., the shipments to the mother country are only 31 per cent. below those of the first half-year of 1886. This return does not include Government bark. The next public sales at Amsterdam will be held on December 8.

**CINNAMON.**—The market is quiet. Small sales of fair chips at 2 $\frac{3}{4}$ d. per lb. are reported. On Wednesday ordinary Grenada common bark realised 3 $\frac{3}{4}$ d. per lb.

**CLOVES.**—The market for *Penang* cloves, the supply of which is now plentiful, has declined; and on Wednesday 83 cases sold, without reserve, at 12 $\frac{3}{4}$ d. to 13 $\frac{1}{4}$ d. for fair to fine bright. These cloves are still only about 1d. per lb. dearer than Zanzibar, and therefore naturally obtain the preference over the latter for many purposes. The result of the abundant supply of *Penang* cloves is a further decline in the price of the *Zanzibar* varieties, which sold on Wednesday at 10 $\frac{3}{4}$ d. to 11 $\frac{1}{4}$ d. per lb. for dull to fair.

**COCA LEAVES.**—At Hamburg prices have experienced a considerable decline, about 30 bales very fine *Bolivian* leaves having sold at 1s. 1d. per lb. Good *Bolivian* leaves are now quoted at 1s. per lb. *Peruvian*—good, 11d.; brownish, 7 $\frac{3}{4}$ d. per lb. *Truvillo*—ordinary, 10d. per lb. for a quantity.

**COCAINE.**—The quotation still remains 10d. per gramme for German in bulk, but we have not heard of further transactions.

**COCHINEAL.**—*Teneriffe* blacks have been sold at lower rates, viz. 1s. to 1s. 0 $\frac{1}{2}$ d. for rosy, 1s. 2d. for grey, and 11d. for artificial grey. Silver cochineal is not very plentiful, however, and keeps steady.

**CONDURANGO.**—The Hamburg firm in whose hands the entire stock on that market, say, about 20 cwts. is concentrated, still refuses to sell other than small lots. At present it does not appear as if any arrivals were on the way, but the position of the article, owing to the inflated price, is becoming hazardous, and operators are advised to supply only their immediate requirements.

**COPPER SULPHATE** continues to tend lower; ordinary firsts are now 13l. 7s. 6d. per ton.

**CREAM OF TARTAR.**—Firsts very scarce and firm at 130l to 130l. 10s, while seconds are worth 128l. to 128l. 10s.

**CUBEBS** remain very dear. It is said that small sales of good berries have been made at 25l. 10s. per cwt.

**CUMIN SEED.**—*Maltese* seed quiet but steady, at 48s. to 49s. per cwt. *East Indian* seed is worth 30s. per cwt.

**CUTCH** remains firm, with sales of *Star B* at 34s. per cwt. For the auctions on Tuesday 454 boxes were catalogued but all bought in (*W two stars* at 36s.), except one bag loose MM pieces, which sold at 21s. per cwt.

**ERGOT OF RYE.**—The weakness noticeable last week has become more pronounced, and a number of weak holders are endeavouring to get rid of their stocks by pressing them for sale. It does not appear that any business of importance has been transacted this week. The average annual consumption of ergot in the United States during the last three years is estimated at 85,000 lbs.

**FENUGREEK SEED.**—Our stock is still decreasing, although prices remain at 8s. to 8s. 6d. per cwt. The export demand continues brisk, and no fresh arrivals have taken place.

**GALLS.**—At auction 50 cases pale but broken *China* sold without reserve at 56s. to 56s. 6d. per cwt. Since then prices have stiffened, and it is said that 57s. 6d. per cwt. has been refused for *China* of good quality.

**GAMBIER.**—Of 644 packages offered on Tuesday, 450 bales block, imported in April last per *Valkyrien*, sold, without reserve and on account of the importers, at 24s. 3d. to 24s. 9d. per cwt., mostly 24s. 6d. Forty bags cubes were sold at 33s. 7d. to 34s. for badly to first-class sea-damaged. Privately sales are reported of free cubes on the spot at 35s., and block, October shipment, at 23s. 6d.

**GINGER.**—*Cochin* quiet without change; of 794 packages offered at the auctions only 261 sold as follows:—Rough

small to bold partly wormy, 21s. to 24s.; good bright medium and small, 26s.; partly cut, small to medium, 30s. to 32s. *Bengal* bought in at 14s. 6d. per cwt.

**GLYCERINE.**—The market is firm, but without change, at 83l. to 85l. makers' price for well-known brands, sp. gr. 1.260.

**GUM ANIMI** sold at previous prices for *Zanzibar*, of which 92 cases were offered. The prices paid were 12l. 10s. to 13l. 5s. for fair to rather bold amber, mixed sorts, 10l. 7s. 6d. to 10l. 12s. 6d. for dark ditto, 7l. 2s. 6d. for small, and from 6l. to 7l. 17s. 6d. for bean and pea. A few lots *Demerara* copal were offered, but found no buyers.

**GUM ARABIC.**—Throughout the week prices of all varieties have ruled very firm, although business is checked to some extent by the dearth of the article. In *Senegal* gum a large trade has been done at advancing rates, and at Bordeaux all the best parcels have been disposed of. About 1,000 bags remain still on that market, but the quality of nearly the whole of this is undesirable. The price has advanced to 7l. 5s. on the spot. Of *East Indian* gums, Amrad remains quiet without business, but brown gum is steady, and holders ask a small advance pending fresh arrivals. High-class Aden and Amrad gums are still very scarce, but brown Amrads are offering in quantity, from 70s. to 90s. per cwt. Barbary kinds are selling in small lots at 110s. per cwt. *Egyptian.*—Amrad is slow of sale. About 50 bales Ghezirah have been sold at 87s. per cwt., and there is still more obtainable at that price. At to-day's public sales 1,718 packages were offered. The bulk of this quantity (1,476 packages) consisted of *East Indian* gums, containing but a small proportion of Ghatty. There were also 192 bales *Egyptian* Amrad, 13 bales Ghezirah, and 32 packages Turkey. Of *Cape* gum only four cases were catalogued. No *Australian* gum was shown. The feeling was on the whole decidedly easier, and most of the quantity brought forward was bought in. Of *East Indian* gums Amrad sold at a decline of fully 5s. for the ordinary and medium qualities, common dark to fairly good amber drop 52s. to 75s., good amber to fine pale soft 91s. to 135s. per cwt., red siftings 31s. 6d. to 44s., small to fine white ditto 60s. to 72s. 6d., drossy pickings 25s. to 35s. Ghatty steady for fine, but common and medium varieties 3s. to 4s. lower. The *Egyptian* gums were bought in at nominal prices.

**GUM COPAL** quiet, with small sales of good amber *Manila* at 67s.; dark ditto at 45s.; chips, small to medium, 24s. 6d. to 36s. per cwt.

**GUM KOWRIE.**—There was a fair demand for the 625 packages offered, and a good proportion sold at steady rates—fair amber to fine selected, 83s. to 102s. 6d.; brown scraped, 71s.; partly scraped sorts, 55s. to 57s.; very ordinary to good chips, 28s. to 62s. per cwt.

**GUM OLIBANUM** without business. Holders ask more money than buyers are disposed to concede, and only a few lots out of the 314 packages offered were sold. Siftings at 13s.; ordinary drossy and yellow drop at 32s. per cwt.

**HEMPSEED** in steady demand, 22s. 6d. to 23s. per 336 lbs. having been paid for ordinary *Russian* on the spot. Shippers of new seed seem to experience great difficulties in obtaining the quantities sold on forward contracts, and in many cases the latter had to be cancelled, so that the prospects of receiving early supplies of new seed are small. No new seed seems to have arrived yet at either Riga or Liban, and even offers of late shipments cannot therefore be obtained. It is probable that the general rise in feeding stuffs will not be without influence on the value of this article.

**IODINE** firm, but unchanged, at 9d. per oz. *Iodide of potassium*, 11s. 3d. per lb.

**LINSEED.**—Heavy quantities have been imported, but the steadiness of the demand has kept prices from falling. *Dutch* seed sells largely at 43s. to 45s. per 424 lbs. for good to fine. *Sicilian* slightly dearer at 46s. Fine *Hungarian* steady at 40s. *East Indian* is held at 39s. to 37s. 6d. for Bombay and Calcutta respectively; *La Plata* at 36s. to 39s. For fine *English* seed 48s. is asked.

**MACE** unaltered, with small sales of common wild *Java* at 6d., ordinary to fine *West India* 2s. 5d. to 2s. 11d. per lb.

**MORPHIA** unchanged. The manufacturers quote 7s. 6d.



**MUSTARD SEED.**—*Brown* seed firm at unaltered rates. *White* plentiful at 10s. 6d. per bushel for the best quality. There is a rather better inquiry for this variety.

**NUTMEGS** are easier, with sales at public auction of fine bold *Penang*, 65, at 3s. 10d.; 68 to 93, at 3s. 7d. to 2s. 7d.; 111 to 155, at 2s. 3d. to 1s. 2d. *Bombay*, 94 to 144, at 1s. 3d. to 1s.; common wormy down to 6d. per lb. *West India*, 71 to 86, 3s. 2d. to 2s. 8d.; 95 to 148, 2s. 4d. to 1s. 6d.

**OILS (ESSENTIAL).**—*Star-anise* very quiet, at 7s. 2½d. to 7s. 3d. per lb. on the spot. *Bergamot* quiet with sellers of good quality at 7s. 3d. per lb. The new crop will probably be under the average, although not so small as originally anticipated. The oil will be made in December next. *Cassia* dull and neglected. No higher price than 2s. 7½d. per lb. can be quoted. There is not much doing in *Lemon*; the new crop, which is due at the end of next month, promises to be a good one. *Lemongrass* is rather firm, 2d. per oz. being now asked. There is a decidedly firmer feeling for *Menthol*; we quote 5s. per lb. for good crystals. *Otto of rose* quiet and unchanged. *Peppermint* steady for American. The H.G.H. brand is still quoted at 12s. 9d. per lb.

**OILS (FIXED).**—*Cocoonut* quiet at 24l. for fine Ceylon, 30l. to 32l. for Cochin, and 25l. 10s. for Mauritius. *Cotton*, 16l. 17s. 6d. for crude, and 20l. for refined, on the spot; November-December, 18l. 10s. *Linseed* steady at 19l. 5s. to 19l. 10s. spot, according to packing. *Palm* quiet at 22l. for fine Lagos. *Rape*, English refined, 25l. to 25l. 10s.; brown easy, with sales at 23l. 10s. for month. November-December and January-April are quoted at 13l. 15s.

**OIL (PETROLEUM).**—The market is firmer. *American* spot, 5½d. to 5¾d.; November-December, 5½d. to 5¼d. *Russian*, 5½d. to 5¾d. Reviewing the position and outlook of the article Mr. W. H. Samuel writes that an advance in prices has already taken place, and there is now every indication that a higher range of prices will be established and maintained for some months to come. The position at present presents quite a new and remarkable aspect, owing to the large development in the demand for Russian oil, the highly satisfactory quality of the greater portion of which is being so fully recognised that it is in many quarters ousting American oil from the field. The demand has indeed been so large that the Russian refiners have advanced their prices to the extent of nearly ¼d. per gallon, and now that the trade are coming to recognise the real value of good Russian oil, there is no reason why the best brands should not command within ¼d. per gallon of the price of "Royal Daylight." The firmness displayed by the American markets last month has been more than maintained, and the upward tendency of the primary market has had a like effect upon home markets. But as our supply is larger than at same time last year, the prices that ruled during the most important part of last season can hardly be expected to be touched, but there is every likelihood of the recent advance being improved upon and maintained. It is a remarkable fact that, notwithstanding the large increase in the consumption of Russian oil, the exports of refined petroleum from America to Europe, from January 1 to September 30, have been over 10 per cent. in excess of the exports during same period last year.

**OIL (TURPENTINE).**—Since our last report there has been an advance in *American* spirits. We quote to-day 26s. 9d. to 27s. for spot.

**OPIMUM.**—There is nothing doing and quotations are merely nominal. Since last week, when it was telegraphed from Smyrna that the market there was firmer, there has been no alteration. A correspondent writes from Smyrna on October 15:—"Our market continues to follow a retrograde movement in spite of the best-founded calculations of our operators, which pointed in an entirely opposite direction. In all probability the future of the article will entirely depend upon the atmospheric conditions preceding the winter sowings in the growing districts." Until October 12 the weather in these regions appears to have been rather unfavourable to these sowings, the heavy rains having been succeeded by renewed heat and drought. The sowings have therefore been but small hitherto, and in the meantime the season is passing. The principal holders in Smyrna, notwithstanding the continued weakness of the market, appear to adhere to their bullish views, and point to the following

alleged facts in support of their theory that the market must soon recover: the smallness of the Persian crop, which is only 40 per cent. of last year's; the insufficiency of the stock in China; the actual exports of Turkish and Persian opium from London to Hong Kong; the high prices which continue to be paid for new opium on the primary markets, and the Dutch Government purchases. With regard to the latter it is now said that a Constantinople firm has made a contract for the delivery in Holland in January next of 150 cases at 18s. per lb. It is also said that last year the Dutch Government has bought so little that even 400 cases will not be sufficient to cover its requirements now. The arrivals at Smyrna on October 14 were 508 cases, against 3,400 cases at the same date of 1886, and 1,064 in 1880, when the crop was only 25 per cent. larger than this year's, and the price averaged 26s. 4d. per lb. against 21s. now.

**PEPPER (BLACK).**—The market is rather dull, and the 1,731 bags offered at auction this week mostly retired unsold, less than 180 being disposed of at the auctions, and 50 immediately afterwards. *Singapore* good, sold at 8½d., *Tringannu* fine heavy at 8¼d., good, but first-class sea-damaged *West Coast* at 7¾d., and *Siam* dust at 2d. per lb. A Tellicherry correspondent writes that the new crop is likely to be from 10 to 15 per cent. larger than last year's. The drought which has prevailed caused apprehension of the failure of the harvest, but timely rains have allayed all fears.

**PEPPER (WHITE).**—A heavy quantity of *Singapore* pepper, mostly of old import, was sold by public auction at a decline of ½d. to ¾d. per lb., viz., 12½d. to 12¾d. per lb. for dark to very good, landing weights. Private sales of new white *Singapore* at 13¼d. and *Siam* at 12¼d. per lb. are reported.

**PIMENTO.**—Lower prices were accepted at the auctions, 350 bags selling at 2d. for ordinary to 2⅞d. for fair.

**POTASH COMPOUNDS.**—*Bichror te* neglected at 4½d. *Chlorate* steady, but quiet, at 6d. *Yellow Prussiate* 7¼d. per lb.

**QUICKSILVER** firm but unchanged. The importer's price is still 7l. 15s., second-hand 2s. 6d. less.

**QUININE.**—Howard's price is still 2s. 3d. for bottles and 2s. 1d. for tins. German makers' nominally quote 1s. 5d., but would no doubt be glad to take 1s. 4d. per oz. We hear that a small parcel of second-hand German in bulk sold at 1s. 3½d. per oz. to-day.

**SAFFRON.**—The feeling in the market is rather quiet, and in anticipation of the new Spanish crop, which has now been all gathered, very little business is being transacted. The prices for the new crop are about to be fixed now, and will certainly be lower than those now quoted; but in the meantime, if anyone wants to buy, the old price would probably have to be paid. The first parcels of the new crop will probably arrive here early next month.

**SEEDLAC.**—A parcel of 148 bags just arrived from Kurra-*chee* was quickly disposed of at Tuesday's auctions. Good bright red realised 35s., rising to 36s., and dust 30s. 6d.

**SENEGA.**—Prices are advancing, and 1s. 9d. per lb. is now asked for good bright root on the spot. Our American correspondent cables that New York holders are taking their stock out of the market.

**SHELLAC.**—The week opened rather quietly at the late advance, and scarcely any business was done before the public auctions on Tuesday, which included 438 cases. Of this number only 75 cases were disposed of at unchanged rates—viz., *Second Orange*, E G in diamond, unworked, landing weights, 52s.; V in heart, ditto, 47s. to 47s. 6d.; K in diamond, 47s.; and livery T N at 46s. per cwt. Privately business has been done at 52s. for second *Button* lac on the spot. The market closes very steadily with favourable reports from Calcutta.

**SODA COMPOUNDS.**—*Ash* rather steadier at 1½d. to 1¾d. landed. *Bicarbonate* quiet at 6l. 5s. to 6l. 10s. *Caustic* firm at 7l. 5s. for cream, and 7l. 10s. for 60 p.c. white. *Crystals* are firm, and quoted at 52s. 6d. in London and 46s. on the Tyne. *Nitrate* firm at 9l. on the spot.

**SOY.**—Small parcels of *China* have changed hands at 1s. 10d. per gallon.

**SULPHUR** very depressed and tending lower. English 9s. 6d. per cwt. for *Flowers*, and 6s. 6d. to 7s. for *Roll*.

**TURMERIC.**—At Tuesday's auctions 298 bags *Madras* were offered, but the demand was very slow, and only 148 bags, catalogued "without reserve," found buyers, at 7s. 9d. for good bright finger, mixed with bulb, being lower.

**VERMILION.**—Very little *China* is offered at present, and our stock is very limited. The price for good brands is 2s. 4d. to 2s. 5d. per lb.

**WAX (VEGETABLE).**—*Japan* has again advanced, 60s. per cwt. having been paid for good pale squares.

**OIL (OLIVE).**—Steady at 32l. for *Mogadore*; *Sicilian*, 35l.; and *Spanish*, nominally, 37l.

The following refers to the present position of the markets in the producing countries:—At Naples the market has suffered a slight temporary decline, and the export demand remains very slack. In Calabria abundant rains have fallen and the crop prospects at Gioza are considered more favourable. In other Italian districts, however, the outlook is very gloomy, and the coming crop is not anticipated to exceed 20 per cent. of a full yield. At Taranto and Monopoli there are complaints of insufficient rains, and in other districts the scirocco and damp weather have caused the reappearance of the olive worm, while in some places the olives are beginning to rot on the trees. In Spain there has been no change in prices, which remain fully 38l. to 39l. c. and f., and export business is of course impracticable. Rain, which was very much wanted, has fallen, and so far benefited the new crop that it is hoped that some shipments may be made when the new oil comes forward, although it is not expected that prices can decline to the present level of the English market. As regards Greece, in Corfu there were complaints of premature falling of unripe olives occasioned by drought, and although rains have since occurred these have been accompanied by hot winds, which are prejudicial to the olives. No export business is doing at present from any of the Ionian Islands. In the Levant (Mytelene and Smyrna) prices are firmly sustained and the tendency is to advance, the quantity of oil obtainable being small. In Candia an advance of fully 1l. per tun has occurred, and nearest quotation is 32l. to 32l. 10s. c.f. and i. In Tunis prices are maintained, and there is not much disposition to sell, shippers being pretty confident that supplies will find a ready outlet in the absence of serious competition from other places. Supplies from Morocco come forward very slowly, and in the unsettled state of the empire the future is very uncertain.

## THE AMERICAN MARKETS.

NEW YORK, October 15.

**O**UR drug market has been fairly active for some time past and shows no signs of slackness. The business transacted is mostly to supply the regular consuming demand, any speculative tendency being checked by the recent tightness of the money market.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

**ALOES (CURAÇAO).**—Stocks in first hands continue to accumulate, for each steamer brings some, and 700 boxes remain unsold. The low price 3½c. (21s.) is no inducement, for dealers and consumers are overloaded. The consumption of *Cape* aloes in the States must be declining owing to competition with this cheap variety.

**BALSAMS.**—No direct shipments of *Tolu* reached this market, but about 75 cases arrived from Hamburg, Bremen, and London. The demand is good and stocks light, for all goes into consumption. For *Copaiba*, higher prices rule all round. No arrivals are reported.

**BROMIDE OF POTASSIUM.**—The combination of bromine producers still hold together and keep the price up. The market for the potash salt is 36c. (1s. 7d.).

**COCA LEAVES.**—Large arrivals of *Huanoco* came to hand, and lower rates would be accepted, probably 30c. (1s. 4d.), for prime quality.

**ERGOT OF RYE.**—The market was very active a week ago, and prices of good old *Spanish* went up to 50c. (2s. 3d.). Since then some weak holders, anxious to realise their profit, offer at 45c. (2s.), and an easier tone prevails. The stock can only be estimated, and is thought to be between 50,000 and 60,000 lbs., or about one-third short of the annual consumptive demand in the United States.

**HONEY (CALIFORNIAN).**—Higher prices are demanded in San Francisco, and quotations are, in fact, prohibitory for export. Ordinary strained in cases, mixed colours, as usually shipped, cannot be laid down in Liverpool under 36s. per cwt. Very little can be floated for English ports. The total shipments from San Francisco for export since July 1 this year were 165 cases, against 2,759 cases same period in 1886.

**JABORANDI LEAVES.**—A large parcel came to hand from Ceara, and more is expected. The market is rapidly declining.

**OIL OF PEPPERMINT.**—From \$2 75 (12s. 6d.) the price of H. G. Hotchkiss' brand fell to \$2.65 (12s.) during the early part of the week, and about 600 cases changed hands for spot and future. It would appear, however, that the bear raid was not yet over, for this brand has since then been offered at \$2.60, and even under, while single cases are sold at \$2.62½. Bulk oil in the meantime has, if anything, improved, for owing to some large orders from the Continent. Buying began in Wayne County, and as high as \$2.00, or 8s. 3d., per lb. was paid the farmers for the naked oil. Only a few needy growers will part with their oil at this figure, and already a firmer feeling has set in at Lyons and other centres of the trade. From Michigan little is heard. The crop is now all distilled, and, as anticipated, has fallen below last year. The growers there are in no hurry to sell, and generally demand \$2.00 and over.

**QUININE.**—Last week the agent of one of the German makers officially reduced his quotation for large bulk to 33½c. (1s. 5¾d., 5 per cent.), and, as usual, second-hand holders hastened to sell out at lower rates; this they found difficult to do, for the cable news of the auction of Italian quinine in London at 1s. 4d. further demoralised the market, and it would be a difficult thing to find a buyer of a good-sized lot. The stocks here must be large, for German makes keep pouring in, the receipts for the past eight months being 1,000,000 oz. ahead of same period last year.

**SENEGA.**—This article is likely to become very scarce before next summer. The stock here has not been so light for a great number of years, while dealers in the rest say they have none to offer, or ask very high figures for small lots. It is a fact that this year Manitoba sent very little root to market, and that was said to be dug in 1886. This year hardly any was collected there.

**SPERMACETI** has advanced to 38c. (1s. 8¾d.), and is very firm. There is a fair demand, which is expected to increase with the approach of winter.

## AMERICAN CABLEGRAM.

NEW YORK, October 27.

**QUININE.**—The supply, especially of German brands in bulk, is now so much in excess of the demand that the decline has assumed still larger proportions, and to all appearance we have not yet arrived at the bottom, although there are to-day holders of B.&S. quinine, in 100-oz. tins, willing to accept 29c., equivalent to 1s. 3½d., per oz., less 5 per cent. laid down in London.

**SENEGA.**—The market is hardening. Holders who were quoting \$0.35, or 1s. 9½d., per lb., London terms, for good bright Western root have withdrawn their supply from the market.

## THE GERMAN MARKET.

HAMBURG, October 25.

**S**INCE our last report there has been very little doing in the market. Although several articles have risen in value, the business in general has been a very quiet one, and no important movement in any department has taken place.

The prices in this column are given in marks (11 $\frac{3}{4}$ d.) per 100 kilos., or per kilo. (1 kilo. = 2 lb. 3 $\frac{1}{2}$  oz.; 50 kilos. = 1 cwt.). The prices in parentheses show the parity in London.

**ALOES.**—*Cypre* unchanged, quiet but steady in price. *Curaçao* remains neglected; there is a good supply of this variety, but it includes only a few lots of the better grades.

**ANTIMONY (JAPANESE).**—We are quite out of stock.

**BALSAMS.**—*Copaiba* is only in small supply, and the market has made further improvement, 3.95m. to 4m. (1s. 8d.) being now asked for fair quality. *Peruvian.*—No change has occurred in this article, and genuine quality is offered at 9.12m. (4s. 3d.). *Tilu* somewhat weaker, a small lot brought 3.10m. (1s. 3d.).

**BAKES**—*Cinchona.*—Business in Porto Cabello has been confined to small parcels, and prices are firmly held at 120m. to 125m. (5d. to 6d.). *Condurango* remains unchanged; it is very scarce and prices still advance. *Quillaya* slightly easier.

**CAMPHOR (REFINED)** without much business, at unchanged rates.

**GALLS (CHINA).**—Very little is offering.

**ERGOT OF RYE** is somewhat weaker, 3.75m. to 4m. (1s. 7d. to 1s. 8d.), although nominally a higher price is asked.

**LYCOPodium.**—In Russia prices are reported lower, and fine qualities are held here at 3m. (1s. 3d.).

**MENTHOL.**—In prime crystals business has been done at 8n. (3s. 6d.)—a very low price.

**OILS (ESSENTIAL).**—*Star-anise* steady, the small stock is held at 16 $\frac{1}{2}$ m. (7s. 3d.), but for arrival lower rates have been accepted. *Cassia* quoted unchanged at 5.50m. (2s. 6d.) for good quality. *Lignales* without business; prices are slightly easier; genuine oil can be had at 20m. to 22m. (9d. to 10d.). *Peppermint*, H. G. Hotchkiss brand, is now obtainable at 11 $\frac{1}{2}$ m.; Japanese oil has sold well lately at 8m. to 8 $\frac{1}{2}$ m. (3s. 6d. to 3s. 9d.).

**OILS (FIXED).**—In *Cod-liver* a better feeling exists, but prices are still unchanged. Steam refined Loföden at 85m. to 90n., and Finnmarken 75m. to 85m. per cask.

**QUININE** remains exceedingly flat.

**ROOTS.**—*Jalap.*—There has been some business done last week, and prices are firmly held at 110m. to 115m. (5d. to 5 $\frac{1}{2}$ d.). *Ratanhia.*—Genuine Payta root remains firm at 100m. to 105m. (4 $\frac{1}{2}$ d. to 4 $\frac{3}{4}$ d.); small arrivals came this week to hand.

**SARSAPILLA.**—*Honduras* very quiet; a good supply in all brands is offering at low rates. *Mexican* (Vera Cruz) is in abundant supply, and quite neglected; only first qualities met attention.

**SEEDS.**—Our stock of West Indian *Musk* seed has found buyers. East Indian qualities are offered at 80m. to 100m. (3 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d.).

**WAX (BEES')** is in good demand; *Chilian* is steady at 225m. to 230m. (110s. to 112s. 6d.), first-hand holders being out of stock. A parcel of very fair quality *Tahiti* wax is offered at 225m. (110s.); *African* unchanged and quoted at 170m. to 180m. (82s. 6d. to 87s. 6d.).

**WAX (JAPAN).**—A steady trade is being done at prices slightly above our last quotations, viz., 102m. to 104m. (50s. to 51s.); in Japan the article is reported higher, it is said 110m. to 112m. (50s. to 51s.).

**BINIODIDE OF MERCURY IN GONORRHEA.**—Dr. C. R. Illingsworth (Accrington) says: I find that the biniodide of mercury is very serviceable as an injection in gonorrhœa when used in solution of iodide of sodium. I combine it with carbonate of soda and sulphate of zinc as follows:—

Sol. hydrarg. bichlor.	..	..	..	..	3ij.
Sodii iodidi	..	..	..	..	5ss.
Sol. morph. (B.P.)	..	..	..	..	ʒss.
Sede bicarb.	..	..	..	..	3iss.
Zinci sulph.	..	..	..	..	gr. x.
Aquæ ad	..	..	..	..	ʒvj.

M. et solve. Ft. inject.

*Brit. Med. Jour.*

MEDICATED WATERS.

**MR. RICHARD L. IGEL**, in the *American Journal of Pharmacy*, recommends the following method for making medicated and aromatic waters as more convenient and satisfactory than the U.S.P. method, or the method in which magnesia, phosphate of lime, and similar powders are used.

To make 2 pints of aqua menthæ piperitæ take a No. 33 filter; lay it upon any smooth clean surface, a piece of window glass or a pill tile, drop upon its surface 30 minims (well distributed) oil of peppermint, fold the paper and tear it into small fragments, introduce them into any suitable bottle, add 1 fluid oz. of distilled water and shake the contents to a pulpy consistence; now add water, 1 or 2 fluid oz. at a time, two or three times consecutively, shaking well after each addition, then add all or most of the 2 pints of water and throw the whole upon a filter, using the reserved portion of the water to wash the pulp, and make the product measure 2 pints.

By using the corresponding shop-bottle for the manipulation it serves the additional purpose of cleaning the same perfectly. The filter used for aqua menthæ piperitæ, if carefully dried and preserved, may be used again for the same purpose. The whole operation, excepting filtering, does not occupy over five minutes' time, and the resulting preparation cannot be otherwise than pure. A No. 33 filter has been found sufficient for 4 pints of medicated water, although more paper may be used to make sure.

Obituary.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

**FRIEND.**—On September 28, Mr. William Friend, chemist and druggist, Winkleigh, North Devon. Aged 49.

**KITE.**—On September 30, Mr. John Cazeneuve Kite, pharmaceutical chemist, City Road, E.C. Aged 42.

**MASON.**—On September 30, Mr. Arthur Mason, chemist and druggist, St. Thomas Street, Weymouth. Aged 55.

**OLDHAM.**—On October 26, Mr. Robert Thurgood Oldham, of Rickwood & Co., 19 Kingsmead Square, Bath.

**OSTLE.**—On October 6, Mr. Henry Ostle, chemist and druggist, Witton Park, Durham. Aged 44.

**QUEENBOROUGH.**—On October 1, Mr. John Queenborough, chemist and druggist, West Street, Boston. Aged 48.

**SMITH.**—On October 13, Mr. Dudley William Smith, chemist and druggist, Southampton Street, Camberwell, S.E. Aged 65.

**STORY.**—On October 6, Mr. Rufus Story, the head of the well-known New York firm of spice dealers of that name, died at his residence, Bergen Point, N.J. Aged 74. Mr. Story, who started in life as a retail dealer in a small way of business, is estimated to have left a fortune of over one million sterling.

**STOTT.**—On September 26, Mr. William Stott, pharmaceutical chemist, Sowerby Bridge, Yorkshire. Aged 70.

**TAYLOR.**—On October 12, Mr. Thomas Hibbert Taylor, chemist and druggist, Cross Lane, Pendleton, Manchester. Aged 76.

**WALKER.**—On October 10, Mr. Henry Walker, pharmaceutical chemist, Bernard Street, Russell Square, W.C. Aged 82.

RECRYSTALLISED COCAINE has generally a much more satisfactory effect than that which has not been thus purified. D.S. A. H. Cook and Boulting, of Hampstead, give their testimony to this effect.—*Brit. Med. Jo. rn.*



### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

### The Assistants' Examination, Apothecaries' Hall.

SIR,—In reply to "Assistant," in last week's impression of your valuable journal, wishing for details of the above examination, I will endeavour to furnish a brief outline of my own experience, from notes taken immediately after passing it a few years ago. The subjects in the candidate is examined are translation of physicians' prescriptions, the British Pharmacopœia, pharmacy, pharmaceutical chemistry, materia medica, and medical botany. In my case the subjects were taken in the order in which they stand, but the mode of examination was rather a novel one, yet at the same time I think it is a very good and practical one, which thoroughly tests the practical knowledge of the aspirant to the distinguishing title of "A.S.A." (Assistant of the Society of Apothecaries), which corresponds in some measure to "A.P.S." There is this difference, the former is purely a dispenser's qualification, the latter a qualification to keep open shop for the sale of poisons, which of course includes dispensing.

[It is not necessary to become an A.P.S. in order to keep open shop, &c. The Minor certificate is all that the law demands.—ED.]

On being ushered into the examination room with a few others, we were each told off to different tables, each table presided over by an examiner. The table at which I was placed was spread over with the different articles of materia medica, including a few chemical preparations, such as alum and cream of tartar in large crystals, &c. I was asked to take a seat at the table close to the examiner, and soon found myself in the presence of an exceedingly kind, polite, and thoroughly practical gentleman. I had my subjects well in hand, having read up carefully my B.P., with the aid of the ordinary text-books, and in the midst of my ordinary duties, for about three months before presenting myself at the Hall.

The first test was in prescription reading. A book of physicians' prescriptions was opened, and a somewhat formidable one selected, comprising a gargle with acet. destil., an effervescing mixture with succus limonis, an inhalation, a blister and leeches. Each of these had rather long directions in abbreviated Latin. I was asked to read this paper through in unabbreviated Latin, and then render it into English. This being done, I was next questioned on the different ingredients in each prescription, as to preparation, impurities, dose, tests, &c., and these questions led on to others: for instance, acet. destil. in gargle led to questions respecting the production of acetic acid, what other acids were in the B.P., how prepared, properties, doses, &c. In the effervescing mixture, what decomposition took place, how would you prepare CO<sub>2</sub> and CO? properties, uses, what CO<sub>2</sub> does in the atmosphere, and a few other simple questions on the atmosphere. Hydrochloric acid, why it fumes on exposure to the atmosphere. Arsenic preparations, tests, doses, &c., and so on, down to leeches, upon which I was not questioned.

I was also questioned respecting antimony, its preparations, doses, &c., hydrocyanic acid, strychnine, and morphia. I was then taken on the compound powders—p. ipecac. co., p. jalapæ co., and p. rhei co., proportions and doses.

In materia medica I had to name the different articles on the table, giving B.P. names, botanical names, and the natural orders to which they belong. Materia medica appeared to me to be their stronghold. I was questioned minutely on most of the specimens upon the table, even to "cusso" in flower. It is important to be well up in this subject. The few articles I particularly remember being questioned upon were the following:—Nux vomica, botanical description, properties, doses, preparation, and where does the brucia reside in the nut. Ipecac root, Beberu bark, sarsaparilla root, galls, jalap root, colchicum corms, senna leaves, how to distinguish genuine from spurious, and the time for gathering the above. The only questions in botany asked were in reference to nux vomica, ipecac., the barks, and jalap root, which were by no means difficult.

I can only say I was highly pleased altogether with the examination itself, as well as with the courtesy and kindness manifested by everyone connected, from the president to the humblest official, and thus I feel a special pleasure and deep interest in obliging "Assistant" with my humble experience. Reading. A. S. A. (178/35.)

### Some Remarkable Scientific Discoveries.

SIR,—You are as a rule so very much to the fore in the matter of the latest scientific news that I am positively astonished to find a variety of items of great importance in the newspapers of late which are not noticed in the columns of THE CHEMIST AND DRUGGIST. I can only charitably suppose, sir, that your autumn holiday has been greatly extended, and that the staff— Well, I will say no more on this point, lest on returning to town and reading this you should remorselessly see fit to make a wholesale addition to the ranks of the unemployed of London.

I look to you, however, to give me, and other readers thirsting for information, some further particulars respecting the marvellous things I am about to relate.

In a very recent *Spectator* I find an account of an entirely novel compound just invented in America, which not only must supersede gunpowder and make gun-cotton take a back seat, but will out-dynamite dynamite or beat blasting gelatine to a jelly.

The actual bursting-up power of this compound, however, is of secondary importance. The all-conquering property lies in the fact that it "explodes forward only!" Please publish its constituents in your formulae next week.

My second piece of news may perhaps have something in common with the first, but you, sir, will doubtless explain both at once. Two days ago I read in the *Echo* about a terrible "chapter of accidents at Coventry," which included at least one fact quite new to me if not to chemical science. Here it is:—"In the afternoon a boy had his hand nearly blown off with oxalic acid, which exploded." Be good enough to tell me what kind of oxalic acid caused this dreadful accident. Was it the common kind, or one of those awful di-nitro-tri-hazy compounds which German chemists are always inventing in order to mystify English students and prevent them making any progress with their technical education?

My third "discovery" appears in the *Rhyl Advertiser*. Henceforth I learn that no ships will need distilling apparatus or fresh-water tanks, since by a pinch of the patent Thalassion "sea water may instantly be transformed into a refreshing effervescing draught."

As of course this can have nothing to do with Mr. Kay's citrate of silver process, you, sir, will oblige by quoting the specification.

Number four comes from a number of journals not very high in the scale of civilisation. This says:—"To prevent postage stamps from sticking, dust them with lycopodium." Now, sir, I thought that the special aim and object in life of all well-conducted postage stamps was to stick; but as, like a good dispenser, I always follow directions, I have succeeded in rendering my entire stock (7l. 13s. 4½d.) of these "labels" (as the authorities call them) wholly useless for their intended purpose.

Can you tell me how to restore the vanished stickiness? At present this "lycopodium" is like a poser to

Yours inquiringly,

TSAR-KUTS. (181/34.)

**Homœopathy.**

SIR,—Does “Heder” mean that his three doctors employ homœopathic remedies in homœopathic doses, or in allopathic doses?

I think that most chemists who have had a lengthened acquaintance with homœopathic practitioners will say that homœopathy is the flag they fly, and “allopathy,” or “any pathy” that will cure, is their system, but to take it as gospel that, say,  $\frac{1}{100}$  grain calc. carb. three times a day in a globule is of any service is to believe in the impossible, and I expect none disbelieve it more than homœopathic doctors.

ZERO. (183/20.)

182/61. *A Druggist*, writing in reply to the question, “True Homœopaths: Where are they?” says that he has known some homœopaths. As far as he can understand, Hahnemann taught the physician to do the best he could in every case that came before him according to his knowledge. First that like would cure like, and then to use as small a dose as possible. To effect that cure, “A Druggist” is not aware that Hahnemann forbade any means to be used which might effect a cure. He has had many years' experience, and knows as much about bleeding, leeches, cupping, blisters, calomel, antimony, &c., as most men, but he is thankful to say they are out of fashion now, and rarely used to excess. This, he believes, is principally due to the teaching of Hahnemann. He believes in regulating diet, giving such homœopathic remedies as aconite and belladonna, and, he continues, “I know it's naughty for a druggist to prescribe, but if I do I like to give something that will do no harm. Customers are not gulled, for they come and come again, saying, ‘My child was better from the first dose of that medicine; I would rather have homœopathic medicine.’ If my customer would sooner have blue pill and black draught, castor oil, rhubarb, or calomel, very well, I sell them. But for me and mine, and those who wish for my advice, I say the less medicine you take the longer you will live and the more comfort you will see.”

**The Homœopaths: Where are They?**

SIR,—Your correspondent, “A Chemist,” asks the question, “The homœopaths: where are they?” and in the same breath answers the question by acknowledging that they are nowhere, *i.e.* among allopaths, chemists, &c. He infers that a medical man can't be a homœopath if he uses hydropathy, massage, mesmerism, &c., but were he educated in the cultus of homœopathy he would know that even Dr. Hahnemann used these means as adjuncts, believing that each of them acted on the axiom of *Similia similibus curantur*. Homœopaths not only use these means of cure on the *similia* principle, but because they have also proved them to be great helps in the cure of disease, and even use allopathic medicines, as they know that many of them are homœopathic in their action, and, knowing this, they would not be worthy of their patients' confidence if they did not use for their benefit every medicine which they know to be curative on homœopathic principles, just as many eminent allopaths are now using the medicines of the Homœopathic Pharmacopœia.

October 24.

A HOMŒ. (184/22.)

**Deputation to the Irish Pharmaceutical Council.**

SIR,—It might be a little interesting, to those of your readers outside Belfast who have taken the trouble to read the correspondence that has appeared of late in your valuable journal on the Irish trade question, to know something of the census of the trade in Belfast, in view of the proposed deputation, and of whom it is likely to be composed.

There are at present, keeping open shop, seventeen apothecaries and pharmaceutical chemists, nine chemists and druggists who were in business at the passing of the Pharmacy Act, and seventeen druggists and grocers who have commenced or added a drug department to their business after the Act was passed; these numbers are exclusive of wholesale firms not also in the retail.

The most striking point in this census is the large number who have commenced business without any qualification, and contrary to the provisions of the Act, a large percentage of them not even having had any previous ex-

perience beyond that of the grocery counter. In fact, I know a case where a “worthy” added a drug department to his business, and was in full swing, when a kind traveller one day drew his attention to the fact that a drawer was not the correct thing for his liq. potass., which bore that label; it was only effect he was studying.

These are the parties who propose a deputation to “exchange views” with the Council, and by way of encouraging friendly intercourse “Wholesale Druggist” suggests they would then “co-operate” to place their heel on the neck of the poor grocer, whose only sin is that he has not sinned enough to qualify for exemption.

Awaiting result of deputation,

I remain, &c.,

A BELFAST CHEMIST.

October 25.

**A Lost Formulary.**

SIR,—I beg to refer to a paragraph with the above heading in your issue of October 1. The writer thereof has been so grossly misled that I am constrained to send you the enclosed pamphlet for his enlightenment.

Mr. Theodore A. B. Piesse never asked for the book, or—before it became obvious that it was to be prejudicially used—he would have had it.

It is odd that I could not be found, considering that, from the moment the book was known to be in my possession, I was never from under police surveillance. In fact the detective of whose attentions I mostly complained saw me embark for England!

As you have proclaimed me so freely I trust I may rely upon you to my vindication.

I am, sir, yours respectfully,

Birmingham, October 24.

HERBERT H. BARNETT.

[This letter refers to an item of news concerning a manuscript recipe-book alleged to contain the working formulæ of Messrs. Piesse & Lubin's perfumes. This book, which had been the property of a certain Mr. Theodore Piesse, came into the possession of Mr. Barnett, who was afterwards prosecuted at Auckland, N.Z., on the charge of stealing it. The pamphlet referred to reprints from an Auckland paper a full report of the trial, from which it appears that in the opinion of the magistrates there was no shadow of a case against Mr. Barnett, who, they said, left the Court without a stain on his character. The pamphlet gives, besides the report, several leaderettes from the *Auckland Evening Bell* commenting on the case, and a naturally indignant letter written by Mr. H. B. Barnett, the father of the principal character in the history.]

**McKenzie's Eye-lotion.**

SIR,—This is a well-known preparation throughout Scotland, being the formula of the late Dr. McKenzie, of the Glasgow Ophthalmic Institution. The original formula is:—

Hydrarg. perchloridi .. .. .	gr. ij.
Ammon. chloridi .. .. .	gr. xij.
Pulv. cocci cacti .. .. .	gr. ij.
Spt. vini rect. .. .. .	ij.
Aquæ qd. .. .. .	ʒij.
Mix and filter.	

So frequently was this eye-lotion at one time in demand that the directions for its use are embodied in stock labels, supplied by Scottish label printers, thus:—

*Lotion for the Eye.*

Pour out about a table-spoonful of this fluid, and mix it with as much boiling water in a teacup. With a piece of old linen, or soft sponge, bathe the eyelids with the mixture while it is yet warm for a few minutes, and then, by leaning back the head, allow a little to flow in upon the eye.

Keep the teacup covered, and having re-warmed the contents, repeat the bathing of the eye three times a day.

MORTAR AND PESTLE. (183/18.)

**Modern Medicine.**

SIR,—As I have often been enlightened by the experiences of your correspondents, I feel bound to add my mite to so valuable a common stock as your correspondence columns.

A poor person came to me for white lead paint for

erysipelas, which had been ordered by a club (Oddfellows') doctor. I supplied pigment. plumbi ph. ph. (Bayly), but was somewhat surprised to hear that the doctor had intended his patient to get his prescription dispensed at an oil shop (3d. a pound, pots and brushes lent). This struck me as the richest specimen of how we are doctored since a prescription upon a card of a M.R.C.S. for "cayenne turpentine" during the Chian turpentine craze.

Yours truly,

202 Caledonian Road, October 24. E. WARRELL.

### DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

#### Quinine Mixtures.

##### I.

SIR,—Could you inform me how to make a presentable mixture of the following:—

Potass. iodid.	..	..	..	gr. xv.
Quiniæ disulph.	..	..	..	gr x.
Liq. ammon. acet. conc.	..	..	..	ʒj.
Syrupus auranti	..	..	..	ʒiij.
Aque cinnamomi ad	..	..	..	ʒiv.

M. Ft. mist.

I dissolved the quinine with 10 drops of acid. sulph. dil. but when the liq. ammon. acet. was added it separated again and collected on the top.

Dartmouth, October 22.

H. HUMPHRY.

##### II.

SIR,—Will you please explain cause of following mixture depositing a greenish flaky, sticky precipitate:—

Potassii iodid.	..	..	..	3ss.
Ferri et quiniæ cit.	..	..	..	ʒj.
Glycerin.	..	..	..	ʒvj.
Aq. chlorof. ad	..	..	..	ʒvj.

M.

Can the unsightly deposit be prevented? If so, how?

VRIDIS. (181/58.)

[The deposit formed in the first mixture is acetate of quinine, but this may eventually be changed into an iodide. It is a mistake to dissolve the quinine with acid in this case; rub it to fine powder, add 2 drachms of the cinnamon water, 2 drachms of mucilage of acacia, and then add to the rest of the ingredients previously mixed. The deposit cannot be prevented in the second case either. Dissolve the citrate in 4 oz. of chloroform water, add the glycerine, and 4 drachms of acacia mucilage, then the iodide, previously dissolved in 6 drachms of chloroform water.]

#### Lanolin in Liniment.

SIR,—I find no difficulty in making the liniment given by "Garson," by substituting  $\frac{1}{2}$  oz. of neatfoot oil for one-third of the soap liniment.

Yours truly,

HEDER. (184/27.)

#### Vaseline Lotions and Liniment.

SIR,—I bought some time ago a very heavy petroleum oil, about the consistence of sublime olive, and quite as tasteless as vaseline. It was sold to me as "vaseline oil." The name is pirated, I suppose; but the substance is a capital representative of vaseline in a liquid form. The petroleum odour is noticeable upon heating over a gas-flame, but not at the ordinary temperature of the skin. This is what I should use in the case of formula given by "Devonensis."

Yours truly,

HEDER. (184/27.)

### LEGAL QUERIES.

63/177. *Coffee*.—There can be nothing to prevent your announcement of the fact that you have been "patronised by the Queen, the Prince of Wales, and others." But in this country you might only use the Royal arms if you have been formally appointed, nor without that could you legally say "by appointment." This of course applies only to chemists within the United Kingdom. You being outside the jurisdiction of British courts could not be affected by such a law. The formal appointment as chemist to the Queen can only be obtained through the Lord Steward, Board of Green Cloth, Buckingham Palace; to the Prince of Wales, through the Comptroller and Treasurer, 1 Buckingham Gate, S.W.

15/179. *J. H. M.*—The only medicinal preparations for which you may use methylated spirit without special authorisation from the Board of Inland Revenue are soap, compound camphor, aconite and belladonna liniments, and in the manufacture of sulphuric ether, chloroform, and hydrate of chloral. The Board of Inland Revenue do not allow the sale of medicated spirits other than *bonâ-fide* medical preparations; but they will not interfere with the sale by chemists to medical and scientific gentlemen of quantities of pure spirit not exceeding 8 oz. for purposes of medical and scientific research.

183/38. *J. Scott*.—If you have a certificate to the effect that you have passed the subjects of the medical Preliminary examination, you should send it to the proper quarter with a fee of 2l. 2s, when it will be accepted instead of the pharmaceutical Preliminary.

183/43. *Corporal Trim*.—You can submit the certificate at any time, allowing at least three months' interval before you enter for the Minor.

51/180. *Nelson*.—The law does not prevent an unregistered person describing his shop as the "Nelson Drug Stores."

4/184. *Alpha (Dundee)*.—Both the preparations described on your bill are liable to medicine-stamp duty.

72/183. *H. J.*—The sale of poisons by unregistered persons is illegal, whether they are sold as homeopathic medicines or in any other form except as patent medicines. It might be difficult, however, in the case of some of the dilutions to prove the presence of the poisons.

72/184. *Y. Z.*—You must get special permission from the Board of Inland Revenue to sell any wine other than a Pharmacopœia preparation without a wine licence. Whether the preparation would require a patent-medicine stamp as well depends on how it is entitled, labelled, and advertised.

38/182. *A. F. I.*—The certificate of the Ontario College of Pharmacy will not entitle you to carry on business as a chemist and druggist in Great Britain. No certificate but that of the Pharmaceutical Society of Great Britain suffices here.

183/55. *Arbeitsam*.—Although the Institute of Chemistry was established to ensure that consulting and analytical chemists are duly qualified for the proper discharge of the duties which they undertake, neither that nor any other body can prevent you practising as an analyst, and receiving fees for such work.

### MISCELLANEOUS INQUIRIES.

176/58. *W. D.*—To bring up the gloss of photographs they are rubbed with a weak alcoholic-solution of soap and allowed to dry before being passed through the burnisher. A very high polish or enamel is imparted with collodion.

178/22. *Magazine*.—**Lime Juice and Glycerine (Genuine).** Almond oil, 8 oz.; white wax,  $\frac{1}{2}$  oz. Melt the wax in the oil and add glycerine and lime juice, of each 1 oz.; water, 2 oz.; rectified spirit,  $\frac{1}{2}$  oz.; essence of lemon, q s. Mix.

177/66. *H. S. F. B.—A A S.*—See letter on the subject in this issue. Assistant (not Associate) of the Apothecaries' Society is what is meant by the letters.

186/46. *Hocken*.—The quantity of carbonate of soda in the marking ink formula (*Diary*, 1884) is  $\frac{5}{16}$ ss.

180/29. *Crocus*.—Yes.

*W. F. Bartle*.—**Composition Powder.**—Bayberries, 4 oz.; Canadian pine and ginger, of each, 2 oz.; cayenne and cloves, of each, 2 drachms. Mix.

182/33. *J. Young*.—**Boot Top Liquid (Brown).**—Infuse 15 grains of saffron in 2 oz. of boiling water for half an hour and strain; then add  $1\frac{1}{2}$  oz. of tincture of rhubarb, and sufficient concentrated infusion of rhubarb to make 4 oz.

177/42. *Physstigmatis* (Jamaica).—(1) The most satisfactory way to keep articles like linseed meal and powdered drugs in climates such as yours is in tin-lined drawers and bins. Bottles should of course be used when they are suitable. (2) "Washington soap."—Robinson's indexical silver soap is probably meant. (3) It is the more correct thing to say "give" rather than "take" on the labels for children's medicines.

182/3. *Saponis* (Guiseley).—See an article on lin. terebinthinae, page 659, May 28, and numerous notes and letters on the subject before and after that date. There is no difficulty in making lin. saponis provided you ensure that the soap is digested at the proper temperature.

180/8. *W. A. P.*—**Syrup of Bromide of Nickel.**—Dr. da Costa's formula is as follows:—

Bromide of nickel .. ..	160 grains
Glycerine .. ..	4 fl. oz.
Sugar .. ..	8 oz.
Water .. ..	4 fl. oz.

Dissolve the bromide in the water, add the glycerine, and dissolve the sugar in the mixture without heat.

180/36. *A. Brumger*.—A good example of the influence of gases in generating electricity is in Grove's gas battery. In this two plates of platinised platinum are enclosed in two tubes (fitting into a bottle containing acidulated water), one filled with hydrogen, the other with oxygen; as soon as the external wires are connected voltaic action begins. The action is thus explained: it takes place at the surfaces of contact of the platinum, the liquid, and the gases. The hydrogen adhering to the surface of the platinum, in the line of contact between that surface and the liquid, polarises the particles of the liquid, so that the oxygen atom of each molecule of water is turned towards it, and the hydrogen atoms are turned the other way; the action thus being similar to that of zinc in the ordinary battery. The oxygen also polarises the water in the same direction, so that the hydrogen disappears twice as fast as the oxygen, water being formed.

181/60. *Subscriber* (Newcastle-on-Tyne).—**Depilatory.**—Orpiment, 1 part; starch and quicklime, of each, 10 parts. Powder and mix. To be made into a paste with water immediately before applying to the skin.

180/9. *A Subscriber* (Ramsbottom).—There is nothing wrong with the formula which we gave for **Liquid Blue**, but there is with the Chinese blue which you have used. A good Chinese blue costs about 3s. 6d. per lb., and should

form a perfect solution of a brilliant dark blue colour with the quantities of water and acid which we gave. We do not know of any work specially devoted to feather-dyeing.

180/43. *J. Watt*.—We have previously published the following formula for an emulsion of **Malt Extract and Cod-liver Oil**:—

Powdered acacia .. ..	1 oz.
"   tragacanth .. ..	1 drachm
Saccharated solution of lime .. ..	$1\frac{1}{2}$ "
Glycerine .. ..	4 fl. oz.
Malt extract .. ..	20 "
Cod-liver oil .. ..	20 "
Essence of vanilla .. ..	10 minims
Ess. of bitter almonds (1 in 20) .. ..	20 "
Oil of cloves .. ..	8 drops

Mix the gums and the glycerine together in a large mortar, and add 4 oz. or so of the malt extract. Now mix the liq. calc. sacch. with the oil, and add about the same quantity of it as of the extract. Incorporate it thoroughly, add more extract, then more oil, and so on until the whole has been added, lastly incorporating the aromatics.

180/17. *Student*.—What you require is a medical Latin book, such as Ince's "Latin Grammar of Pharmacy."

180/5. *Cosace*.—Spongio-piline is very commonly used as a **Label Damper**. A good damper may be made from a gallipot; place a piece of wood over it, and over this a piece of the spongio-piline 2 to 3 inches wide, and sufficiently long to permit contact with the water placed in the gallipot.

180/24. *W. E. Everett*.—**Starch gloss.**—See page 20, August 20. **Plate Powder.**—(1) Equal parts of precipitated chalk and heavy carbonate of magnesia, coloured with rouge. To be used with solution of ammonia. (2) Putty powder, 1 part; precipitated chalk, 5 parts. Mix.

181/58. *Viridis*.—Try bay salt to keep down the weeds in your courtyard. Chlorinated lime has also a good effect.

183/3. *W. Bignold*.—There are several ways for **Blackening Brass**. (1) See last volume, page 353. (2) Mix together 4 parts of spirits of salt and 1 part of white arsenic. (3) White arsenic, 2 parts; hydrochloric acid, 4 parts; sulphuric acid, 1 part; water, 80 parts. (4) "Hcder" lately gave a formula for a preparation for blackening gun sights which will suit.

180/4. *H. Machon*.—An improved formula for glycerine and cucumber will be found on page 406 (September 24).

183/19. *W. G. C.*—You have evidently got the fruit of *Capsicum annum*, which has an almost tasteless pericarp, but fairly pungent seeds. Apart from pungency this fruit has a good flavour, and a mixture of it and ordinary B. P. capsicum makes excellent Chili vinegar.

183/70. *Lux*.—The **Unfermented Ginger Wine** (September 24, page 409) will keep perfectly in bottles without the addition of salicylic acid. To make it less sweet omit 1 lb. of sugar, and add  $\frac{1}{2}$  drachm of salicylic acid. The primary taste is developed by the addition of a mixture composed of tincture of cinnamon,  $\frac{1}{2}$  oz.; tincture of capsicum, 2 drachms, and tincture of fresh lemon peel, 2 drachms. For lemon wine essence use tincture of fresh lemon peel flavoured with a little vanilla and cœnanthic ether; and for orange wine essence, tincture of fresh bitter orange peel, fortified with oils of orange and bergamot, and 5 drops of otto of rose to the pint. Of either of these essences add 3 to 4 oz., and the same of rectified spirit, to each gallon of thin acidulated syrup.

183/55. *Arbeitsam*.—In studying for the Associateship examination of the Institute of Chemistry it is advisable to

use only the books recommended by the lecturers on chemistry, physics, &c., whose classes it is necessary to take out before you can enter for the examination. The safe books are, for chemistry, "Fownes," "Valentine," and Sexton's book on "Quantitative Work"; for physics, Balfour Stewart's "Lessons" is suitable.

### Books.

183/2. *F. H. Priece*.—Medical Books for Chemists.—See reply (167/5) in our issue of October 1.

172/20. *G. H. Hardie*.—Dr. Moncell's "Electric Lighting" (Routledge, 2s. 6d.). Try the Eclipse Battery Company (Limited), The White House, Telegraph Street, E.C., for the electric lamp which you mention, or the Electric Supply Company, Queen Street, E.C.

28/6. *C. Smith*.—A new edition of "The Art of Dispensing" is in course of preparation. For Latin terms used in prescriptions see Ince's Grammar (Baillière).

179/7. *A. C.*—See above. The best books for a young man learning to be a chemist are the British Pharmacopœia (respect that next to your Bible), any work on elementary chemistry and botany, and a text-book of materia medica, such as Bentley's, Gerrard's, or Will's.

183/72. *H. J.* asks the name of a book giving "the most useful account of oxygen as the greatest supporter of life." There is a short but excellent chapter on the subject in Huxley's "Physiology." "H. J." should read that and the literature supplied by Brin's Compressed Oxygen Company (Limited).

169/3. *Rubber*.—The indiarubber part of the rollers of washing machines is fixed to the central iron tube by means of a layer of vulcanite, which adheres to the metal more securely than ordinary rubber, and unites perfectly with the latter also.

184/40. *E. J. B.* puts the following question:—Will you please tell me in next week's *C. & D.* what drugs an emigrant to South America should take out with him?

[Quinine, ipecacuanha, and Dover's powder, for fevers; an astringent, such as pil. plumbi c. opii, for dysentery; a bottle of chlorodyne, a little laudanum, an aperient pill, and a liver pill. These are the principal requisites, and in the course of time the settler, like Livingstone with his "rousters," will rely on one or two articles to cure everything. You may get some hints from some of our advertisers who pay particular attention to the patent medicine trade.]

184/13. *A. M.*—You will find several recipes for lemon syrup in back numbers. We presume that that is what you want.

182/151. *S. H. Pullan*.—The following is Dr. Coghill's improved formula for the inhalation for the antiseptic inhaler:—

Eucalyptol .. .. .	3j.
Chloroform. .. .. .	3j.
Tr. iodi. ætherial. .. .	3ij.
Acid. carbolic. .. .. .	3iʒ.
Creasoti .. .. .	ij.

M.

The ethereal tincture of iodine should be of a strength of at least 25 grains to the ounce.

### Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

178/49. Makers of cardboard cases (for bottles) and metal camphor-roll boxes.

168/54. Composition of Dr. Mayer's ointment.

### THE WORRIED MARINER.

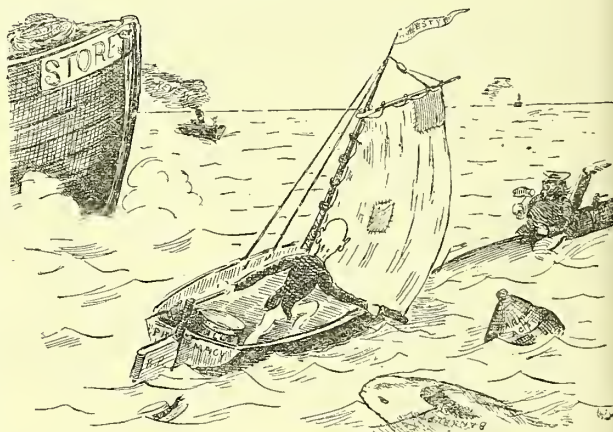
AN ill wind blows, his courage flows,  
His forehead furrows free;  
He was the last that ever past  
The School of Pharmacy.

His sail's displayed to catch "the trade,"  
His helm the true B.P.  
Through dark and bright, by day and night,  
His compass—*C. & D.*

He's steered his boat and kept afloat,  
While many others fail;  
But times are such, that overmuch  
His bald head looketh pale.

He guideth now his trembling prow  
By "Act of Pharmacy";  
For awful shocks on sunken rocks  
Have bolder wrecked than he.

So near him roars gigantic "Stores";  
The grocer crew he sees,  
Who steer their course and right across  
The honest Pharmacy's.



While right ahead, by science dread  
Equipped most thoroughly,  
(Anti-pyrine and Lanoline  
And ev'ry novelty),

The German "Herr Apotbeker,"  
Mann'd by "starvation pay,"  
Will run him down and let him drown  
And calmly slog away.

The "Stripes and Stars" all outlet bars;  
Who with such odds could cope?  
Unerring screw, "The Revenue"  
Cuts off his meagre bope.

And like a shade by wild heart made,  
A-watching in the dark,  
Unseen yet there, it comes like care,  
The hungry waiting shark.

His chance has fled, all bope is dead,  
"The Pharmacy" has hee[a]led;  
Alone he braves the surging waves,  
His fate already sealed.

He'll join ere long the countless throng,  
The sad Majority,  
And bid repose from all his woes  
In jaws of Bankruptcy.

Oct. 10, 1887.

FRED REYNOLDS