Moscow to Constantinople in the Years 1817-1818. Dr. F. R. Packard reviews, with well deserved praise, Professor Howard Kelly's and Dr. W. L. Burrage's *American Biographies*.

We have received from Messrs. J. and A. Churchill, the medical publishers, a copy of their new catalogue, which extends to 47 pages, and is illustrated by figures from a number of their publications. All branches of medicine, as well as several branches of science, appear to be covered.

Messrs. Churchill announce for early publication *An Introduction to Biophysics*, by Dr. D. Burns, Grieve Lecturer in Physiological Chemistry in the University of Glasgow, with an introduction by Professor D. Noël Paton, F.R.S.

Messrs. E. and S. Livingstone, of Edinburgh, have undertaken the agency of the *American Medical Record* in this country and the colonies.

APPLIANCES AND PREPARATIONS.

Pure Glucose.

GLUCOSE of special purity suitable for intravenous or subcutaneous injection was, it appears, until lately only obtainable from foreign manufacturers. We have now received from the British Drug Houses, Ltd., a sample of glucose prepared by them especially for this purpose, accompanied by a pamphlet summarizing its therapeutic applications and detailing the indications for its adoption, which are largely the same as those for normal saline solution; data for the preparation and administration of solutions are supplied.

Our analysis shows that the preparation is free from arsenic and the inorganic impurities which may be present in glucose being derived from reagents of manufacture. The glucose yields on incineration an ash consisting almost wholly of calcium sulphate, which amounts to no more than 0.2 per cent. It is free from acid products, and contains no perceptible amount of organic substance other than glucose. These characters distinguish the article as one possessing a degree of purity greatly exceeding that defined by the tests of the *British Pharmacopoeia* for pure glucose, and one which is well suited for intravenous or subcutaneous injection.

A sample of the same product rendered anhydrous was also submitted to us by the same firm and found on analytical examination to be equally satisfactory. This preparation is made specially for use in the bacteriological laboratory, and also as an excipient for hypodermic tablets.

A Tonsil Haemorrhage Clamp.

Mr. COURTENAY YORKE, Aurist and Laryngologist to the Liverpool Stanley Hospital, etc., has designed a tonsil haemorrhage clamp which presents the following features: (1) Lightness; the weight is just over one ounce, and consequently when in use causes no dragging pain. (2) The inner blade terminates in a small disc, roughened on the inner surface and intended to serve as a wool carrier. (3) The outer blade ends in an elongated plate, which makes counter-pressure behind the

angle of the jaw. This plate is pivoted at its centre, so that it can be adjusted for use on either side. When the instrument is to be applied wool or ribbon gauze is made secure to the roughened disc so as to provide a soft rounded pad of requisite size. The counter-pressure plate is set so that it is concave forward and inclined downwards and forwards. The blades are now widely opened and the inner one carried into the mouth until the pad enters the tonsil wound cavity. On closing the instrument the counter-pressure plate applies itself, automatically and without any guidance, to the side of the neck just behind the angle of the jaw. It only remains to adjust the pressure until the wound is sufficiently firmly held between the two blades. The application of the clamp causes very little discomfort, and one can easily be used on each side at the same time. As the act of swallowing cannot take place while the clamp is fixed, it is necessary to incline the patient's head so that the mouth contents can dribble out. The same instrument is serviceable at all ages; the size of the pad, however, must be adapted to the extent of the tonsil wound cavity. In sensitive patients a preliminary cocaine spraying of the fauces and the use of morphine will be helpful, while, if desirable, the pressure pad may be moistened with adrenaline or other styptic. The instrument is made by Messrs. Mayer and Phelps, London.

THE ADRIAN BROWN MEMORIAL LECTURE.

ADRIAN BROWN was the first Professor of the first established University School of Brewing in this country, and the first memorial address in his honour was delivered by Professor Henry E. Armstrong at Birmingham University in February last. It has since been published in the *Journal of the Institute of Brewing* (vol. xviii, New Series, 1921, pp. 197-260). Under the somewhat forbidding title, "The Particulate Nature of Enzymic and Zymic Change," Professor Armstrong has conceived and brought forth a most fascinating account, not only of the man who was a striking and lovable person, but more specially of his subject, and tells in quite poetic strain the stories of the barley-corn and the yeast-cell, which are veritable fairy tales of scientific endeavour and advance.

There is much in the lecture which appeals to the technical chemist, and it is the thesis that enzymes are never in true solution which gives its title to the address. But this conception, important as it is, forms after all but a small portion of the work, and more general interest will be felt in the wider issues which are raised. Just as the neighbouring town of Burton-on-Trent played so important a part in the development of Adrian Brown's genius, so also it influenced Professor Armstrong when he sang the praises of its chief product; not the beer of the present day, or its predecessor that of the war days, but of real beer with bottoms, not filtered and refined almost beyond recognition, as is the custom nowadays. Just as when reading Dickens's accounts of good square meals the appetite is stimulated, so when one hears of Professor Armstrong's recollections of real good drinks, told with gusto and accompanied with snatches of verse, the feeling of healthy thirst arises in the reader. The teetotaler stands revealed as a puny person and the prohibitionist as a pretender, as one scans Armstrong's scathing sentences on each. Even the physiological investigators who have attacked the problem do not escape. To investigate the effects of alcohol by estimating the rate at which a typist can work is declared to be childish. Suet pudding for lunch has much the same effect, yet the food reformer has not yet called suet pudding a drug nor classed it with morphine as a depressant. One of the many shibboleths our author takes the opportunity to expose is the present-day cry for organized research. True investigators are born, not made, and to expect real research from committees appointed *ad hoc* cannot but result, he thinks, in disappointment. Professor Armstrong with prophetic instinct looks forward to a glorified Burton-on-Trent, which will not only brew good beer, but will form the centre of work out of which many biochemical problems will be solved, for, after all, are not the bodies of the higher creatures, man included, congeries of cells akin to the yeast cell?

The story of Pasteur's work, which started from the examination of tartaric acid crystals, and which was diverted into the biological groove by the accidental observation that a mould preferred (to use with apologies this vitalistic subterfuge) to thrive upon one of the isomers and not the other, has never been better told, nor do I remember to have seen more clearly put the meaning of the asymmetric carbon atom and its mirrored image, and the important part it plays in nature.

The share in the rise of the science of brewing taken by other chemists, such as Horace Brown, Adrian's half-brother, Cornelius O'Sullivan, Griess, Böttinger, Emil Fischer and others, is outlined in a most interesting manner. But the contributions of physical chemists working, as so many do, in circumscribed grooves, meet with but little favour; their work, moreover, is obscured by their love of mathematics. The modern tendency of numerous biologists to express their results in formulae rather than in the King's English is a great bugbear to Professor Armstrong. As Huxley insisted, you get little out of the mathematical mill but what you put into it; unless the mill is worked with brains it cannot be effective. "The men in our ranks who have worked it have too often been chemists but superficially, and being without the sympathy which comes only of understanding have failed to notice the many factors at work." Whatever faults Professor Armstrong has, fear of plain speaking is not one of them; nor can he be accused of narrowness in his sympathies. Since he has turned during latter years to the biological aspect of chemistry and recognized its overwhelming importance, he appeals directly to the physiologist and to the medical man.

His address is so full of biological meat that it is difficult to make a selection from the mass of original thoughts he presents there, but to comment on all would mean an article longer than the lecture itself. I will therefore be content with one more reference, and this to a point of nomenclature. The word "vitamine" has for long stunk in the nostrils of the chemist. The loss of the final "e" has deprived it of much of its sting, but Professor Armstrong prefers to get rid of it altogether, and proposes in its place the word *advitant*. If only its coiner had been the first in the field! Vitamin is now, one fears, firmly rooted; one can only regret the difficulty there always is in uprooting these ill-advised expressions; still, if such be possible, *advitant* as a substitute appears free from all objection.

W. D. HALLIBURTON.

THE BALTIC INTERNATIONAL CHOLERA CONFERENCE.

It appears that conditions in Russia are reaching a point that may have serious effects upon the health of Europe. One of the most productive districts of Russia, formerly the granary both for that country and for Europe, has been stricken by drought, which has destroyed the crops and reduced the Russian people to a state of famine. An emigration that is almost a panic has started, we are told, from the famine districts, and the horrors of the flight of those starving people have been increased owing to the fact that such diseases as cholera, typhoid fever, and scurvy continue to follow them. The districts from which the emigration started are stated to be already so affected by cholera that combative measures are impossible in present circumstances. The cholera epidemic is gradually spreading over the country, and the rest of Europe is faced with the danger of cholera. The three Baltic states, Latvia, Esthonia, and Lithuania, have decided, therefore, to assume the responsibility of making a sanitary cordon against the spread of the disease. A Baltic conference was suggested by Lieut.-Colonel Edward W. Ryan, M.D., the American Red Cross Commissioner to Western Russia and the Baltic states, and this conference was held in Riga from July 25th to 27th under his honorary presidency, with the Assistant Director of the Latvian Health Department, Dr. Kivitzki, in the chair. Dr. R. Adelheim of the University of Riga has prepared a report of the deliberations of this conference, which has been forwarded to us at his request by Colonel Ryan.

The conference agreed to adhere to the Paris Convention of 1903-1911, and it was decided to consider the decrees of the Convention of Paris as binding for the three Baltic states, and to induce the representative Foreign Offices to take the necessary steps for their formal adherence to the Convention. As regards relations with Russia, the conference found that no official records on the cholera epidemic had reached the Governments of the three Baltic states, but that nevertheless official papers in Russia did not deny the existence of cholera. Owing to diplomatic difficulties the conference refrained from declaring immediately that Russia was affected by cholera, but agreed to the request of the respective Governments to apply to the Soviet Government for immediate information on the question. The Esthonian representative said that his Government had some time ago applied to Russia for this information, but no reply had yet been received. Should, however, the reply of the Soviet Government to the inquiries of the conference not be received in the near future the Baltic states would of necessity proclaim Russia as an infectious country, and this decision would be followed by a strengthened frontier protection. It was agreed by the conference that whatever the reply of the Soviet Government should be, provided it contained confirmation of the existence of the epidemic, the whole of Russia was to be declared as infected by cholera and action taken according to Article 8 of the Convention.

The further work of the conference consisted in dealing with the internal measures to be taken against cholera, and unanimous agreement was reached on this subject. A restriction of railway traffic was found to be necessary in order that the health departments might confine the right of railway travel to such persons only as could show a certificate of health issued by the local authorities. Compulsory vaccination against cholera was not provided for as an invariable rule, but the medical officer in charge was authorized to apply compulsion should circumstances

call for such action. The question of preventive measures on the adjacent frontiers was further dealt with, and it was agreed that there should be no interruption of trade and traffic, and therefore no frontier closing. The medical staff in a border zone twenty kilometres wide were to report mutually, through the frontier authorities, all cholera cases which occurred.

In order to co-ordinate the work of the three Baltic states it was decided that their bacteriological institutes should exchange as frequently as possible their epidemiological and bacteriological observations. The Governments of the Baltic states were requested to convoke periodical sanitary conferences and to form a permanent central bureau of representatives of the three states with the duty of examining health conditions. During the discussion the hope was expressed that this bureau might gradually grow into an Eastern Europe international sanitary board. As regards the measures to be taken in harbours, these were in conformity with those provided for in the Convention of Paris, Latvia establishing two observation points on the river Dwina in order to lock up the timber rafting, and similar measures were to be undertaken by the other states.

As soon as Russia should be definitely declared to be infected by cholera it was agreed to apply a strengthened military frontier protection, the three States closing their frontier with Russia; the exchange stations for flax and salt were also to be closed, as well as the other transit stations, with the exception of certain notified border stations. Should a cholera case occur in a train all passengers were to be considered as contagious, and kept under supervision for a definite period. Infected refugee transports were expected to arrive within a short time at the border stations, and it would be necessary to submit these refugees to observation in quarantine stations before they set off for other places. The position of Latvia was especially hard in this respect, as Lithuanian refugees would also pass through Latvian territory on their way home. Latvia possessed only one quarantine station, with accommodation at present for 2,500 to 3,000 people, and not only would it be necessary to enlarge this quarantine station, but another still larger had to be established. A shortage was reported in essential equipment such as beds, bedding, bacteriological apparatus and instruments. It was decided by the conference to request the aid of the American Red Cross in organizing European relief work, so that the first wall against cholera should not be in danger of collapse, and the infection spread from the harbours and the borders of the Baltic states throughout the world.

THE WEST INDIAN MEDICAL CONFERENCE.

The West Indian Medical Conference, which was held at Georgetown, British Guiana, from June 28th to July 13th, was the second medical conference ever held in the West Indies, the first being the Quarantine Conference of 1904. The delegates to the Conference were: From Barbados, Dr. John Hutson, O.B.E., Public Health Inspector; from British Guiana, Dr. E. P. Minett, Government M.O.H.; from Trinidad, Dr. John Dickson, Deputy Surgeon-General; from Grenada, Dr. G. W. Paterson, Colonial Surgeon; from St. Lucia, Major H. E. Sutherland Richards, M.C., Chief Medical Officer; from Jamaica, Dr. E. D. Gideon, District Medical Officer. The London School of Tropical Medicine was represented by Professor R. T. Leiper, and Dr. John Anderson, of the Filariasis Commission. A representative from Dutch Guiana was also present in the person of Dr. J. Wolff, Government Bacteriologist of Surinam. The Conference was one of Government medical officers, called at the request of the Secretary of State for the Colonies, and was of an official character. Unfortunately, the colonies of British Honduras, the Bahamas, the Leeward Islands, St. Vincent, and Bermuda, were not represented. His Excellency the Hon. Cecil Clementi, C.M.G., the Acting Governor, presided, and the two vice-presidents were Professor R. T. Leiper and Dr. W. G. Boase, Acting Surgeon-General of British Guiana. Dr. E. P. Minett, Medical Officer of Health for British Guiana, acted as secretary of the Conference.

In his opening address the Acting Governor said that the most fundamental questions in every community were, could the inhabitants of the country be kept in good health? and did the population show year by year a natural increment? If these questions could be answered in the affirmative, the community was sound at the core; if the