Those preparations which require to be kept wet can be preserved perfectly in my B fluid, specific gravity 1,100; the A fluids destroy them. I regret much that a gentleman, (now deceased,) for whom I prepared a great number of such injections, had no faith in my preserving fluids at that time, and employed a chemist to prepare a fluid for the preservation of these yellow injections, which has quite destroyed some of the most beautiful preparations I have ever seen, while some of the fellow parts in my possession are as perfect now as they were seven years ago.

I would recommend that the slips of glass employed for the dry preparations be instantly inscribed with the name of the preparation written with a diamond, for, when dry, it is very difficult to recognise one preparation from another until the operator's eye be educated to the effects of this chemico-gelatinous injection. Where so much wet abounds, gummed paper is apt to come off.

When dry, it is sufficient for the purpose of brief examination by the microscope to wet the surface of a preparation with clean oil of turpentine; immediately after examination, it should be put away carefully in a box, to keep it from the dust, until it can be mounted in Canada balsam.

The bi-chromate of potash is greatly superior in colour to the chromate, which yields too pale a yellow; and subsequent experience has convinced me that the acetate of potash frequently effects its liberation by destruction of the capillaries, and this, even long after the preparations have been mounted in Canada balsam; perhaps this may be owing to some chemical action of the acetate of potash upon them.

I would suggest the substitution of the nitrate for the acetate of lead, as we should then have in the liberated nitrate of potash a valuable auxiliary in the process of preservation.

Although highly desirable, as the demonstrator of the capillaries of normal tissues, I do not think this kind of injection fitted for morbid preparations, the infiltrated gelatine producing appearances of a puzzling kind, and calculated to mislead the pathologist.

In preparing portions of dried, well-injected skin for examination by the microscope, I have tried the effect of dilute nitric acid, as a corrodor, with very good results. But probably liquor potassæ would have answered this purpose better.

Should the price of the gelatine (3*d.* per ounce) be objected to, I believe the "Russian glue," also used by pastry-cooks, might be substituted. Isinglass would prove, doubtless, a beautiful material for this purpose, but it is more costly than the gelatine.

Caledonia-street, King's-cross, 1849.

ON A NEWLY-DISCOVERED SUBSTITUTE FOR BREAD, ADAPTED FOR DIABETIC PATIENTS.

By JOHN PERCY, M.D., F.R.S., &c., Birmingham.

It appears to be now generally admitted, that in the treatment of diabetes mellitus, amylaceous matter should, in a greater or less degree, be excluded from the diet; but, as is well known, under such restriction of food, the diabetic patient soon becomes weary of the ordinary kinds of azotised matter, as beef, mutton, &c.; hence various substitutes for common bread have been proposed. Some years ago, my friend Mr. Morson, of Southampton-row, London, prepared, at my request, specimens of bread containing gluten in various proportions, but it was only relished by the patient when it contained a considerable quantity of starch; and when the proportion of gluten was increased beyond a certain amount, it became so tough and tenacious as to be extremely disagreeable. I have also made trial of gluten bread prepared at Paris, whence it was brought by Mr. Morson, but with no better success. Recently, Dr. Prout has published a receipt for a kind of bread devised by his patient, the late Rev. S. Rigg, (*vide* "Stomach and Renal Diseases," fifth edition, p. 44,) and this is probably the best substitute for common bread which has hitherto been produced.* Some time ago, Mr. Charles F. Palmer, of this town, prepared for me, with great care, specimens of bread from Dr. Prout's receipt, but patients to whom it was given complained of some difficulty in swallowing it, owing to the large quantity of bran which it contained. Mr. Palmer then suggested the use of the matter of rasped potatoes left after the complete removal of the starch by washing, to replace the bran. He carried the suggestion into practice, and produced a kind of bread which I think deserves the attention of the profession.

* I do not mean by this to assert that bread deprived of a portion of its starch is not preferable to common bread, for diabetic patients.

It has been employed in the general hospital of this town, especially by my friend Dr. James Johnstone, and also by several private practitioners, with decided advantage. In composition it may be considered as Mr. Rigg's bread, in which the bran has been replaced by the residual matter of the potatoes above mentioned, and in the fact of its being rendered light and porous by hydrochloric acid and carbonate of soda, precisely as is the case with Dodson's unfermented bread.

I here introduce Mr. Palmer's receipt:—Take the ligneous matter of sixteen pounds of potatoes, washed free from starch; three-quarters of a pound of mutton suet; half a pound of fresh butter; twelve eggs; half an ounce of carbonate of soda; and two ounces of dilute hydrochloric acid. This quantity to be divided into eight cakes, and in a quick oven baked until nicely browned.

It is, as must be obvious, an expensive article, but with many diabetic patients this will not be an object of consideration. It is somewhat improved in taste by being slightly toasted. At first, gum arabic, in sensible quantities, was introduced into this bread, on the ground of the assertion of Professor Graham, that when that substance is taken by a diabetic patient, the proportion of sugar evolved from the system is not thereby increased, and that, consequently, it might probably supply matter for pulmonary oxidation. However, it was found that it rendered the bread tenacious and disagreeable, so that its use was subsequently abandoned.

I wish it to be understood that whatever merit there may be in the production of this bread, is entirely due to Mr. C. F. Palmer.

My friend Dr. Evans has suggested, and I think with reason, that the bread might probably be improved by the addition of a certain proportion of bran; and accordingly, Mr. Palmer has already made some experiment upon the addition of bran, and with a satisfactory result.

Birmingham, March, 1849.

ON ETHER GLUE, OR LIQUOR CONSTRINGENS; AND ITS USES IN SURGERY.

By C. F. SCHOENBEIN, M.D., Basle.

In the middle of December, 1845, I discovered an organic compound, soluble in common ether, which in its dissolved state has ever since been usefully employed as a surgical remedy, and introduced into our pharmacopœias by the distinguished surgeon of Basle, Doctor Jung, under the term, "Liquor Constringens Schoenbeinii." I had no sooner found out the ethereal solution than I recommended M. Jung to try its surgical effects, and from very numerous experiments made in our hospital and elsewhere by that gentleman, it appeared that the said liquor proved to be most efficacious in healing (1) chilblains of all classes; (2) wounds produced by fire; (3) soreness of the skin of different descriptions; (4) certain swellings of the feet, &c. To produce those healing effects of the liquor, which I propose to call ETHER GLUE, or ETHER BALM, the suffering part of the body is immediately to be covered with the solution by the means of a common pencil, such as is used for painting. In cases of exuding wounds, the sore part must, previously to that operation, be covered by sticking plaster. Some of my children suffering much from broken chilblains, I cured with the liquid in a few days.

Many other Swiss physicians and surgeons, and particularly Doctors Miesher and Dennue of Berne, fully corroborated by their experiments the surgical results obtained by Dr. Jung so that the liquid has been very frequently used these last two years. Dr. Jung communicated his results to the Philosophical Society just two years ago, and did more fully so to the Swiss Association for the Advancement of Science, at a meeting which took place at Schaffhausen, eighteen months ago. The paper read by Dr. Jung was published in the Transactions of the Society. As there is hardly any doubt that what the Americans have lately called "Collodion," and stamped into a new invention of their own, is, in fact, nothing but the Liquor Constringens, known and used in Switzerland for nearly three years; everybody must admit that the priority of the preparation and surgical employment belongs to Switzerland, and not to America. Some years ago I sent to a number of scientific friends, ex. gr., to Faraday, Herschel, Berzelius, and Poggendorff, little transparent vessels made out of the Liquor Constringens, and I have no doubt that if my friends should put their little bells into common ether, they would see them readily dissolved, yielding a fluid closely resembling the American Collodion.

If I did not so thoroughly dislike disputes about priority, I might perhaps easily explain how it came to pass, that an old thing has been sent to us from America as a new one.

To conclude, I may as well mention that some years ago, French, German, and English newspapers treated in rather a vague and somewhat exaggerated manner of a discovery of mine, which to them was no less than a remedy good almost for everything, especially for healing quickly all sorts of wounds. There was some truth in that report, for it referred to the experiments made by Swiss surgeons on Ether Glue, but I did not like to say anything publicly about the subject, for reasons which may be easily imagined.

Basle, January, 1849.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEB. 23, 1849.—J. M. ARNOTT, ESQ., F.R.S., PRESIDENT.

REPORTS AND STATISTICAL TABLES OF THE CASES AT THE CHOLERA HOSPITAL OF ST. GILES'S IN THE FIELDS, IN 1832. By the late RICHARD PINCKARD, M.D., Physician to the Bloomsbury Dispensary, and Fellow of this Society.

(Communicated, with Explanatory Remarks, by J. S. STREETER, Fellow of the Society.)

CASES of Asiatic cholera appeared in the parish of St. Giles's in the Fields in the commencement of 1832. A cholera hospital was established for their reception, and placed under the superintendence of the late Dr. Pinckard and Mr. Walker. Between the 15th of February and the 29th of May, a period of fifteen weeks, 131 patients were received into the hospital, or treated at their own habitations. The first table gives the number of cases admitted, and the number of deaths in each of these fifteen weeks. The average number of cases per week was about nine; the number of deaths about 4.5. The total number of cases was 131, and of deaths, 69. No cases were admitted between the 29th of May and the 26th of June, when the disease re-appeared. During the succeeding sixteen weeks, (from the 29th of June to the 16th of October,) as is shown in the second table, 394 cases were admitted, and 182 deaths occurred; the average of cases per week being twenty-six, and of deaths, twelve. The third table gives the duration of the cases, whether fatal or not fatal. The fourth table gives the numbers of deaths and recoveries amongst patients of different ages, and of either sex respectively. The proportion of recoveries was in both sexes the same, but varied much according to the age of the patients, being highest between the ages of ten and twenty; lowest in the most advanced periods of life. In the fifth table, the cases preceded by diarrhoea are distinguished from those not preceded by that symptom, and the proportion of recoveries is shown to have been much greater amongst the cases of the former class. In the sixth table, 124 cases observed during the spring months are divided into those admitted "in the stage of impending collapse," and those admitted "in the stage of actual collapse," and the proportion of deaths and recoveries in each of these classes of cases is shown; the numbers of the patients recovering "with fever" and "without fever," as well as the numbers dying "in collapse," "in reaction," and "in fever," being likewise specified. The seventh table gives the same facts with respect to 381 cases which occurred in the autumn; and the eighth table is a summary of the same facts with respect to the whole number of 505 cases. It is shown, that of 237 admitted in the state of "impending" collapse, only thirty-four died, (twenty-one in collapse, seven in reaction, six in fever,) while 203 recovered, (175 without fever, twenty-eight with fever;) and that of 268 admitted in the state of actual collapse, 219 died, (195 in collapse, fifteen in reaction, and nine in fever,) while only forty-nine recovered, (twenty-seven without fever, and twenty-two with fever.)

Mr. STREETER stated that the fellows of the Society who wished to know the manner in which Dr. Richard Pinckard had noted the individual cases from which these tables had been constructed, would find the first four (as officially reported by himself to the Council of Health) recorded in the *Cholera Gazette*, No. IV., page 142. He believed no others existed, but they sufficed to show the care and range of his inquiries. With respect to one fact connected with cholera, and so clearly determined by the tables, he himself thought it had never received that attention from the profession which its great importance merited,—viz., the large proportion of seizures in which the symptoms of collapse were not preceded by diarrhoea. According to his own experience, collapse oc-

curred not in one uniform manner in all cases, but in various ways. First, there was a class of cases in which the collapse resulted from the direct influence of the poison. Whether this poison was of malarious or human origin, as he did not then wish to raise the question of contagion, he should not now consider; but such cases of direct poison collapse might be attended by no vomiting or purging, or by next to none, and such attacks he believed would prove rapidly and universally fatal. In another class the collapse was produced by the poison, and attended, but not preceded by vomiting and purging, while in a third class the collapse was preceded by diarrhoea of several hours' or even days' continuance, and might fairly be attributed, in part to exhaustion from previous diarrhoea, and in part, but not wholly, as in the former classes, to the direct influence of the cholera poison itself. These varieties of collapse should not be lost sight of in conducting the treatment. With regard to the state of the blood, he was not aware that chemistry had yet shown much more than what Dr. O'Shaughnessy had determined in the epidemic of 1832—viz., the loss of water and of normal salts from the serum, and the presence of these in the evacuations. The specific gravity of the serum is therefore increased. In studying the treatment, he had himself tried to find out the mode in which Nature brought about reaction, and observation at the bedside had convinced him that reaction from collapse never took place naturally or from treatment, without the occurrence of full vomiting. The history of successful cases fully corroborates this view. Visit after visit the unconscious narrator complains of its continuance, and says, "Better, except the vomiting, which still continues." Various emetics have been employed. At one time mustard was most in fashion, but there are objections to its general use. Salt was extensively employed, and among the ignorant and prejudiced has the merit of being considered a harmless and not a poisonous remedy. Tartar-emetic had its advocates, and various other agents. Even cold water acts in this way, and where it suffices to keep up the vomiting produced by a salt emetic, he should be disposed to regard it as the best remedy. In many cases, either with or without small doses of salines, as the carbonate of soda, and the muriates of soda or potass, its employment will keep up vomiting at such intervals as are necessary to bring about and sustain reaction. He witnessed an instance of recovery, where seventy single pints were taken, and for the most part rejected within the twenty-four hours. There were, however, a few cases in which, after vomiting had ceased before reaction was established by cold water, where the vomiting was reproduced and sustained by the addition of stimulants, the carbonate of ammonia and liquor ammonia fortissimus, in twenty and thirty drop doses; but such instances were certainly very few.

Dr. WEBSTER said, from all he could understand, the mortality met with at the St. Giles's Cholera Hospital appeared much greater than the ratio throughout England. In the spring epidemic, detailed in the paper, the deaths were nearly two in every three cases; whilst during the autumn, the greatest number of fatal cases took place amongst old people and females. Hence, the mortality in the St. Giles's district seems to have been as high in 1832, as it proved in Scotland, where more than half the patients attacked with cholera died; but in England the proportion was one death in three and a half patients affected. The severity of cholera in St. Giles's might be easily accounted for by the character of the population, and by the filth and insalubrity of that locality. He (Dr. Webster) had visited this hospital in 1832, as also the neighbourhood; and was by no means surprised at the high mortality now reported. Although no notice was taken in the paper, respecting the general mortality of London, when epidemic cholera formerly prevailed; he (Dr. Webster) would remind the Society that it had materially decreased. This fact was well known, and had been remarked at the time. It was therefore interesting to know that a similar result, with regard to the actual mortality, had recently taken place, not only in the metropolis, but throughout England. In proof of this opinion, he (Dr. Webster) would mention that, during twenty weeks, ending the 17th of February, inst., the total deaths from all diseases in London, amounted to 23,415; whereas, during the same number of twenty weeks, ending the 19th of February, 1848, the aggregate deaths were 29,220; being an increase of 5805 cases ending fatally, or 24.79 per cent. in favour of the present season; notwithstanding the remarkable fatality of scarlatina, to which he (Dr. Webster) had alluded at the last meeting of the Society; besides the existing cholera. But the recent diminished rate of mortality in London, was chiefly remarkable in diseases of the respiratory organs, including influenza, which generally prove