stomach. This may be obviated by careful chewing and by not drinking at meals. Flatulence in the colon is usually not troublesome unless associated with constipation. Care should therefore be taken to regulate the bowels with a mild laxative, if necessary, although some patients find the present diet itself rather laxative, and if the colon be irritable it may even lead to diarrhoea, which a little bismuth or chalk will correct. In all these cases green vegetables should be avoided as they are rich in cellulose and do not add much to the nutritive value of the diet.

Carbohydrates have, of course, to be avoided by diabetics for metabolic reasons and by children with so-called coeliac disease, possibly because of defective pancreatic secretion, but for both these classes of patients special provision has been made in the rations.

3. *Effects of Alterations in Quality of Staple Foods.*

The chief staple food the quality of which has altered since the war is bread. The present bread contains more of the husk of the wheat grain than the pre-war bread, besides added cereals such as maize, barley, rice and oats. Chemically it is superior to white bread, and experiments have shown that it is as well digested (in the physiological sense). Patients, however, often complain that it is "indigestible" (in the popular sense). Most of these complaints are imaginary, and should be disregarded. Those with whom it is most likely to disagree are old persons with defective teeth and feeble stomachs, especially if the heart's action is also defective. Patients with any form of colitis, too, may find the bread irritating. Thorough toasting and careful chewing will get over the difficulty in most cases without having recourse to the undesirable practice of sending in a demand for white flour.

The only other staple foods which have altered in quality are meat and butter. Meat is less fat than it was, but this is not a matter of much moment, as much of the fat of meat used to be wasted. Butter, of course, has largely been replaced by margarine. The food value and digestibility of this substitute are practically the same as that of the genuine article, but there is reason to believe that margarine is deficient in certain vitamines which are present in butter. Where the diet is varied, however, this is not likely to affect health, although it might be detrimental to children fed almost entirely on bread and margarine.

Although milk has not deteriorated chemically in consequence of the war it is worth considering whether it is not more impure bacteriologically than formerly. There is some reason to believe that there has been a substantial increase in tuberculosis—especially of the abdominal form—amongst children in recent months, which may perhaps be attributable to milk. This is a matter deserving further attention and inquiry.

Conclusion.

Reviewing the whole question, it may be said with confidence that there is no reason to suppose that the food difficulties of this country, so far as they have gone at present, have had any adverse effect on health; if anything, their tendency has been perhaps in the opposite direction.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

COLLOID COPPER AND CANCER.

On August 3rd, 1914, a lady suffering from scirrhus of the right breast was sent to me by Dr. Hinds of Chilham, near Canterbury. A complete operation was performed, and the patient returned home. On February 17th, 1916, she came to consult me again with a recurrent growth at the lower end of the scar over the cartilages of the ribs. This was excised down to the perichondrium. In March, 1917, Dr. Hinds sent her to see me again, as she was losing flesh, and there was a nodule in the liver. Of this there could be no doubt. There was a distinct nodule, slightly tender when pressed upon, on the lower edge of the right lobe of the liver, outside the region of the gall bladder, obvious to the patient herself, who indeed had been the first to discover it.

Injections of colloid copper were commencod at once. I saw the patient again on June 15th after thirty-four injections had been given, and made a note to the effect that the nodule was decidedly smaller. In March, 1918, I saw her again. There was no trace of the nodule to be felt. The liver was not enlarged in any direction, and the patient had put on half a stone in weight. The injections, which had been continued once a week, were left off.

I am fully aware of the many sources of fallacy in such a case as this. *Post hoc* is not *propter hoc*. There is no proof that the nodule was cancerous. Even if it were, secondary deposits of cancer in a far more advanced stage have been known to disappear without any treatment at all. But the fact remains that this nodule, about the nature of which three medical men who saw it, besides myself, had no reasonable doubt, disappeared under injections of colloid copper, and that the diminution in size began immediately after the injections were begun. The unmistakable improvement in the health of the patient, which was coincident with the disappearance of the nodule, must be associated with it, but in what way, whether as consequence or cause, will depend upon the view that is taken as to the effects of the copper.

It is to be noted that liver cells appear to have a special affinity for copper salts. It does not follow, therefore, that if the colloid copper were the cause of the disappearance of the growth in this case it would of necessity have an equal degree of influence upon cancerous growths in other organs.

C. MANSELL MOULLIN, M.D., F.R.C.S.,
Colonel R.A.M.C.(T.), Consulting Surgeon to the London Hospital.

SHELL WOUND OF THE PANCREAS CAUSING PANCREATIC PSEUDO-CYST.

I was much interested in the case reported by Mr. John Morley in the JOURNAL of March 23rd, p. 341, as I saw an example of this rare condition in France last year.

The patient was a French soldier who had been wounded ten months previously (August 1st, 1916) by an aërial torpedo. In addition to various other wounds he had one in the left loin, but repeated *x*-ray examinations showed no sign of retained shell fragments. When first seen by me the abdomen was greatly distended and respiration and digestion much embarrassed. The swelling was most marked in the upper part of the abdomen, forming a rounded prominence in the epigastric, umbilical and left hypochondriac regions; the dullness over the tumour was continuous with that of the liver; the stomach, recognized by succussion, was displaced into the left iliac and hypogastric regions. On June 5th, 1917, a median supra-umbilical incision was made and a large tense cyst found, covered above by the hinned-out margin of the liver. One litre of yellow, slightly turbid fluid was aspirated; the cyst was then partly drawn out of the abdomen and freely opened, when two more litres of thicker fluid, more like thin pus, were evacuated. The cyst was so large that the boundaries could not be definitely determined by the exploring finger. The cyst was marsupialized and drained for about three weeks; as there was then no further discharge the wound was allowed to heal up, and the patient, whose general condition had enormously improved, was sent to a convalescent hospital.

R. ATKINSON STONEY, F.R.C.S.I.,
Dublin. Médecin Major 2me Classe.

THE VALUE OF THE WASSERMANN TEST.

RECENTLY I attended a pregnant woman who came to me with a chancre of seven weeks' duration; in spite of its typical and obvious appearance it was said not to be syphilitic because the Wassermann test was negative. In December, 1917, a patient attended for an obvious tertiary lesion; he had been discharged from hospital some few years ago as cured, because his blood was negative. In 1917 a lady went to a well-known surgeon for diagnosis; syphilis was suspected, and blood was sent to two different institutions; the report from one was negative, from the other positive; she had syphilis. Blood was drawn off, and sent to a well-known hospital, in two tubes and under two names; the report on one was negative, on the

other positive; the tests were made by the same man and on the same day; the patient had syphilis. A man attended in December, 1917, for a sore and gonorrhoea; spirochaetes were not found and his blood was negative, but he was deemed suspicious; he was only given mercury. In March I gave him novarsenobillon 0.6 gram at once, and the result was striking; the sore is now practically healed.

The Wassermann test carried out in the usual way—not with cerebro-spinal fluid—is useless; if negative it gives patients a false sense of security. Whether the result be negative or positive it means nothing as to a patient's future; whatever the result, the treatment must be carried out thoroughly.

All patients should know that one course of salvarsan does not cure; they must have more, and not large doses of mercury. My opinion is that marriage should not take place until three years at least have elapsed, irrespective of the test.

JAMES S. ROBERTSON,
Late House-Surgeon, the London Lock Hospital.

Reports of Societies.

TREATMENT OF MALARIAL RELAPSE.

COLONEL SIR RONALD ROSS, Consultant in Malaria, War Office, contributed to meetings of the Society of Tropical Medicine on February 15th and March 15th the results of an investigation started under his direction on February 15th, 1917, with regard to the treatment of malaria. It was founded upon the work done at the four hospitals for which he was from the first Consultant in Malaria—namely, in Aldershot, London, Oxford, and Epsom. A number of officers were concerned with the treatment and pathological work, including Lieut.-Colonels A. D. Milne, C.M.G., E.A.M.S., S. P. James, I.M.S., R. McCarrison, I.M.S., and Major J. B. Stephens, R.A.M.C. The number of cases dealt with was 2,460; the large majority were infected during 1916 on the Salonica front, and were examples of benign tertian. Nearly all were relapses, but a few were original infections. The word "relapse" was taken to mean the relapse of fever clinically like malaria, whether asexual parasites were found or not. Rare cases, in which a sudden increase of asexual parasites without fever occurred, were noted as relapses. Relapses occurring in malaria wards during or after a given course of treatment were always verified by the special malaria officers. Cases, however, could not be detained indefinitely, and it was therefore necessary to issue notification cards with all cases discharged from the malaria wards, with instructions to report relapses to the special malaria officers. These instructions were largely obeyed, but it was impossible to guarantee that every relapse had been reported. Further, the number of relapses given is not final, partly because some of the cases are likely to relapse in the future, and partly because further examination of records may disclose the occurrence of relapses hitherto overlooked. For these two reasons the number of relapses recorded was probably below the true figure.

Frequency of Relapses without Treatment.

Before studying the effects of different treatments it was thought advisable to obtain statistics as to the frequency of relapses occurring among men who had been taking quinine but in whom the drug was stopped. Accordingly, 193 men admitted to the Oxford hospital either for attacks in progress or for recent attacks were watched carefully, but given no quinine; 88 relapsed within twenty-seven days after quinine treatment was stopped, 76 were not sufficiently well to allow quinine to be withheld any longer, and only 29 were considered well enough to be discharged from hospital without treatment. Thus during the month this part of the inquiry lasted only 15 per cent. of the men who remained untreated by quinine escaped either relapses or illness, so that 85 per cent. of such untreated cases remained ill, and 45.6 per cent. actually suffered from relapses during the period.

Treatment of Relapsing Cases.

The trials with various forms of quinine treatment continued from March 23rd to October 17th, 1917. The various treatments tried were of four classes: (*a*) Anti-relapse quinine prophylaxis given, to 1,040 old cases of malaria; comparatively small doses, amounting to about 60 grains a week, distributed in various ways, reduced relapses to about 10 per cent. of the cases a month, and also diminished the severity of the relapses that occurred; 5 grains daily were less effective than 10, but 15 grains daily were no more effective than 10 grains daily, and were less well borne; (*b*) short sterilizing treatments; (*c*) long sterilizing treatments; and (*d*) mixed treatments, given to 1,420 cases.

The trials showed the difficulty of sterilizing cases entirely, and that success tended to vary directly with the magnitude of the daily dosage. The best treatment for old cases of malaria was thought to be a system carried out by Captain Meredith Harrison, R.A.M.C., at the Connaught Hospital, Aldershot. It was used by him between July 10th and October 6th, 1917, for forty-nine chronic cases of malaria, mostly of benign tertian, and mostly arrived from Salonica. Of these, only five had relapsed after the cessation of the treatment in October until the end of February, 1918. Three-fourths of these cases were examined after their original treatment at the Connaught Hospital once a week as regards clinical condition, blood, and weight; as most cases of malaria in the Aldershot Command were closely in touch with the Connaught Hospital, it is thought that the number of cases given as relapsing is accurate. The percentage of cases relapsing was therefore only 10.2. The time which elapsed between the end of the treatment and the beginning of the relapse (in the five cases which did relapse) varied from sixteen to seventy-two days and averaged 34.5 days. Captain Harrison reports that with this treatment the fever was reduced within from twelve to twenty-four hours, and that no asexual parasites could be found after forty-eight hours. The effect of the treatment as regards general improvement of health was good. The treatment was well borne by the patients, except for deafness and tinnitus, and there was very little vomiting. But the patients always object to stopping in bed for twelve days; and we are informed that this line of treatment is not yet to be definitely recommended until its effect on the sight and hearing has been more exactly measured.

The treatment was as follows: The patient was put to bed for twelve days and given daily throughout this period 15 grains of quinine bihydrochloride intramuscularly in each deltoid muscle, together with 10 grains of quinine hydrochloride in anticachexia mixture No. 1 thrice daily, totalling 60 grains of quinine daily for the twelve days. After this the patient was allowed up, and given for three days anticachexia mixture No. 2, four times a day (60 grains of quinine daily by the mouth). After this the patient was given anticachexia mixture No. 3, four times daily for fourteen days (20 grains of quinine daily). He was allowed to do light work all this time. The prescriptions were as follows:

Anticachexia Mixture No. 1.

Quinin. hydrochlorid.	gr. x
Tinct. ferr. perchlorid.	♏ v
Liq. strych. (*B.P.*)	♏ v
Liq. arsenic. hydrochlor.	♏ v
Acid. nitrohydrochlor. dil.	♏ v
Magnes. sulphat.	ʒ ss
Syrup. tolut.	ʒ ss
Glycerin.	♏ x
Aquae ... ... ad	℥ j

For a dose, to be given as directed after food.

Anticachexia Mixture No. 2.

As No. 1, but add

Quinin. hydrochlorid.	gr. v
Acid. nitrohydrochloric. dil.	♏ v

to the dose.

Anticachexia Mixture No. 3.

As No. 1, but reduce

Quinin. hydrochlorid.	gr. v
Acid. nitrohydrochloric. dil.	♏ v

in each dose.

The mixed treatment included the use of tartar emetic, acid arsenoids, sodium quinine sulphonate, ethyl quitenine hydrochloride, and collosol quinine, but the results were not satisfactory.

Experiences in Macedonia.

Sir Ronald Ross also gave particulars of the results of inquiries addressed by the D.M.S. Salonica to a number of

and practised for some years at Willingham, near Gainsborough. Dr. Galloway was a member of the Holland Division of the British Medical Association. He leaves a widow, one daughter, and one son, Dr. Norman Galloway, who is serving with the R.A.M.C. in British East Africa.

DR. GEORGE ROGER PARKER, the oldest medical practitioner in Lancaster, died on March 11th after a long illness. He was educated at the Royal Grammar School, Lancaster, and St. Bartholomew's Hospital. He took the diploma of M.R.C.S. in 1875 and that of L.R.C.P.Lond. in 1877. He held the post of M.O.H. for the borough and port of Lancaster from 1886 to 1910. He was the senior medical officer to the Royal Lancaster Infirmary, having been appointed thirty-six years ago, and was president of that institution in 1908. He leaves two sons, Captain G. M. Parker, Australian Medical Service, and James I. Parker, a sheep farmer in Australia, who is at present serving with the Australian Veterinary Corps at the front, also one daughter, the wife of Dr. W. A. Rail of Capetown.

AMONG the victims of the recent air raids on Padua was Dr. ELIO DE AMBRIS, who continued the work of his master Lombroso. He was the author of treatises on degeneration and criminality.

Universities and Colleges.

UNIVERSITY OF LONDON.

AT a meeting of the Senate on March 20th Professor A. D. Waller, F.R.S., and Dr. S. Russell Wells were reappointed director and treasurer respectively of the Physiological Laboratory. Dr. E. W. G. Masterman has been added to the panel of University Extension Lecturers. The Gilchrist Studentship for Women has been awarded to Mary K. F. Lander of the London (Royal Free Hospital) School of Medicine for Women.

UNIVERSITY OF DURHAM.

ARRANGEMENTS are now completed for the compilation of the register of parliamentary electors of the University of Durham. All graduates, including those who have taken a bachelor's degree, are qualified to be registered. Particulars will be sent on application (enclosing a stamped addressed envelope of foolscap size) to the Registrar, University Offices, Durham.

At the Convocation held on March 30th the following degrees were conferred:

M.D.—C. E. De Silva, J. R. D. Holtby, H. D. Senior, C. R. Wilkins.
M.D. FOR PRACTITIONERS OF FIFTEEN YEARS' STANDING.—C. U. Ind.
M.B.—E. G. Anderson, J. A. Berry, J. Gilmour, H. Sterne-Howitt.
B.S.—E. G. Anderson, J. A. Berry, J. Gilmour, I. Soliman, H. Sterne Howitt.

UNIVERSITY OF EDINBURGH.

AT the spring graduation ceremony on April 4th the following degrees were conferred:

M.B., B.CH.—Eva M. Clark, H. R. Goldberg, W. A. Gray, Martha L. Hamilton, W. G. Hughes, G. Lange, D. O. Macdonald, H. B. Mackenzie, A. R. C. M'Kerrow, J. S. Mann, D. J. Micah, *J. C. Morris, Annie C. Roberts, G. M. S. Smith.

* With second class honours.

UNIVERSITY OF GLASGOW.

THE following degrees were conferred on April 4th:

M.B., CH.B.—*A. B. Stich, *A. Kennedy, *Lydia I. H. Torrance, Annetta G. T. Anderson, T. W. Carstairs, M. Chalmers, Grace Chatterton, A. E. Cochrane, Margaret O'R. Gallagher, Mary B. Gillespie, G. O. Grant, J. C. Hendrie, Alison M. Hunter, Margaret T. M'George, W. S. L. M'Leish, D. Macqueen, J. Nicolson, Agnes P. Routledge, Dorothea H. Suttie, J. J. Treanor, W. A. Walker, J. A. White, G. Young.

* With commendation.

CONJOINT BOARD IN SCOTLAND.

THE following candidates have been approved at the examinations indicated:

THIRD EXAMINATION.—J. H. Bain, T. A. du Toit, J. A. S. Campbell, G. C. Field, D. D. Fernandes, J. Campbell, A. F. Caddell, J. B. W. Telford, A. A. Lamaletie, T. F. Kelly, A. Gold, J. Murray, S. H. Waddy. *Pathology:* H. A. Newton, R. McKinnon. *Materia Medica:* D. Mackay, W. Campbell, W. Barton, Jessie M. L. Wright, J. MacGlashen, J. R. McCubbing, Agnes M. Hill, Janet A. A. Sang, R. Smith, Gracie O. D. Evans, Anup Singh Narula, G. M. S. Lindsay.

FINAL EXAMINATION.—H. W. Bowatson, S. A. Faulkner, A. E. Hempleman, Indra-narayan Borrah, G. H. C. Harding, A. P. Robb, D. C. Howard, R. H. Malome, P. Vertannes, E. E. Bronstorph, D. M. MacLeod, J. H. Blackburn, A. Parker, T. H. J. Douglas, H. Millar. *Surgery:* A. S. Hughes. *Midwifery:* J. J. van Nirkerk, D. A. Walpola, A. H. B. Hudson, R. J. Patchett, A. S. Hughes. *Medical Jurisprudence:* H. McIlroy, Jatindra Kumar Sen, N. J. Patterson, I. R. MacPhail, R. J. Patchett, R. C. Bell, R. A. Cooper.

Medical News.

THE maximum retail price of butter has been fixed in Paris at the equivalent of 4s. 2d. a lb.

A REVISED edition of Taylor's Tables for calculating weekly meat rations is published by Effingham Wilson, and can be obtained through booksellers, price 6d.

THE late Dr. Elizabeth Garrett Anderson left estate of the gross value of £24,098, the net personalty being £15,806.

ACCORDING to the latest estimate of the (American) National Association for the Study and Prevention of Tuberculosis, based largely on the results of the examination of recruits and drafted men for the new army, when about 2 per cent. of men of draft age in the country at large were found to be tuberculous, it is estimated that the number of active cases of tuberculosis in the United States is probably between two and three millions. At present 43,000 beds are available, but 50,000 more are needed.

ACCORDING to the *Neue Preussiche Zeitung* the loss of young male life has been so large that parents of girls in Germany are looking out for careers that will render them independent of marriage. The number of women who desire to become teachers is in excess of requirements, and in Prussia alone there are about 4,000 women medical students. Schools have been established for training girls to be librarians, sick nurses, and children's nurses.

DR. CHARLES S. MYERS, F.R.S., Lieut.-Colonel R.A.M.C., Director of the Psychological Laboratory, Cambridge, will give the second of two lectures on present-day applications of experimental psychology at the Royal Institution of Great Britain, on April 18th, at 3 p.m. The first lecture dealt mainly with the results which experimental psychology has yielded, and may be expected to yield, in the selection of individuals for work requiring special skill, in the prevention of industrial fatigue, and in the application of scientific management to industrial conditions. The principal subject of the second lecture will be the application of the teachings of modern psychology to the proper understanding and treatment of cases of nervous breakdown.

DR. EMILE ROUX recently reported that of the staff of the Pasteur Institute, normally numbering 200, 126 were mobilized in August, 1914. Of these 41 were medical men, 3 chemists, 6 veterinarians, and 76 officers and soldiers. Most of the laboratories had to be closed, only those for rabies, diagnosis, cholera and typhoid vaccination, animal vaccines, and serumtherapy continuing at work. Notwithstanding this curtailment of its activities the institute has rendered enormous services to the armies. Every French army is provided with a laboratory of its own on a large scale and a hospital for contagious diseases. There are more than two hundred laboratories worked by the institute. It has supplied to the army more than nine million doses of antityphoid vaccine. It also furnished the Serbian army with vaccine. Special services were established for malaria and dysentery. At the beginning of the war only 150,000 doses of antitetanus serum were available; within a few months the amount was increased to four million doses. At the beginning the black troops were decimated by pneumonia, and the institute prepared a vaccine which stopped the epidemic.

LIEUT.-COLONEL G. A. CASALIS DE PURY, S.A.M.C. (*Paris méd.*, 1918, viii, No. 3), contributes an interesting note on the medical history of the Basutos which, besides telling the old story of the evil effects of the first contact of natives with the so-called civilization of adventurous Europeans, brings out the sequence of syphilis and malignant disease on a virgin soil. In 1830 his grandfather settled among the Basutos as a missionary, on Livingstone's advice, and was followed there by his son and grandson (Lieut.-Colonel de Pury) as medical men. Until the Kimberley diamond fields were opened up the Basutos lived a happy, healthy, patriarchal life, without prostitution or syphilis, and entirely free from malignant disease, which, however, was known among the few white settlers and the neighbouring Boers. But with the advent of the diamond industry syphilis invaded the Basutos, and then, after a time, malignant disease, especially between 30 and 40 years of age, appeared. Later, tuberculosis, particularly of the lungs, became increasingly frequent, as has often been observed in similar circumstances. Lieut.-Colonel de Pury, after quoting the familiar example of syphilis as a disposing factor in carcinoma of the lip and tongue, records a family with many instances of the two diseases combined, and expresses his belief in a hereditary syphilitic diathesis for malignant disease.