guillotine has been performed, any reamputation must involve division of bone at a higher level. If the guillotine was performed well below the site of election, this is not a disadvantage, but if at or above the site, reamputation at a higher level gives a stump unduly short and possibly useless. If no skin traction is applied, skin and muscle retract, producing a conical stump, with projecting bare bone, and the whole cone must be removed at reamputation, so that the final stump may be far too short. The complication may be avoided by applying skin traction within twenty-four to forty-eight hours of the first amputation. Four strips of adhesive strapping are applied to the skin, the adhesive reaching as near the margin of the wound as possible, and secured by encircling turns of strapping. To each of the strips is attached a cord, leading to a weight suspended over a pulley at the foot of the bed, or, if the patient must be evacuated, a Thomas splint may be used, to the lower end of which the four cords are fastened, the ring being pressed up against the tuber ischii. Detailed drawings of these applications are included in the memorandum.

If the raw granulating surface is repeatedly dressed the patient suffers severe pain, with fluid loss and danger of secondary haemorrhage. This can be avoided by using the "infrequent dressings technique" (as in the Winnett Orr and Trueta treatment of infected wounds). To minimize the risk of secondary haemorrhage in high guillotine amputation of the thigh, it is advisable to ligate the femoral artery in its continuity just below Poupart's ligament at the time of the amputation. If reamputation be performed too soon, healing will not be by first intention, and a second amputation may be necessary, with further shortening of the stump. This can be avoided by deferring reamputation not only until the granulating surface is clean, but until all oedema has disappeared.

Indications for guillotine are as follows: (1) cases reaching the surgeon in such a desperate condition that only an operation performed with this speed and simplicity holds out promise of recovery; (2) cases of persons caught by a limb in machinery or held down by masonry; (3) cases of severe infection or gangrene where the section of the limb can be placed at a low enough level to permit subsequent reamputation at the site of election; (4) cases needing amputation at the site of election or close above it where no skin is available below that level and it is proposed that the guillotine shall be the final amputation.

A flap amputation cannot be performed quite as quickly as a guillotine, and the area of exposed tissue is greater; but there are circumstances in which this operation is preferable. If the site of amputation is determined by the destruction and infection of muscles, the skin below this level being viable, and if the level is at or above the site of election, generous skin flaps should always be cut, the muscle and bone divided at the higher level, and mattress sutures inserted in the skin flaps for continuous traction.

GLASS SUBSTITUTES AND PROTECTION FROM FLYING GLASS

The vast number of casualties, most of them minor but some major, caused by broken glass, prompted an exhibition of the materials now available as substitutes for window glass and the means of protection from glass splinters. This was housed at the Building Centre, New Bond Street, London, and was designed to illustrate the methods of carrying out the recommendations of the Ministry of Home Security as embodied in a memorandum published by its Research and Experiments Branch. A wide range of materials was on view, the larger number of them being some form of textile netting or of cellulose film. The substitutes for glass vary in price from 1s. 6d. to 10s. a square yard; they are weatherproof and capable of being fixed to the metal frames of windows with a special composition. They include netting impregnated with a gelatin-like material, cotton backed with a rubber solution, a kind of bakelite which has the appearance of corrugated iron, wire buried in cellophane, and a material called "dufayglass," which is a cellulose acetate film reinforced with cotton net. To prevent glass from scattering there are various kinds of net to be affixed to glass by wetting and pressure, blinds of black cloth with rubber backing, and wired glass and glass bricks which have been found to withstand severe fire tests and even to retard fire. These bricks form an architectural feature, give a considerable diffusion of light, and, illuminated, might be used to indicate the position of shelters. One of the complications of window protection is that the blast wave has a kind of "S" form, and may cause the glass of the window to fall either outwards or inwards, according to the phase which is in operation at a particular spot. To ensure more complete protection panes should be treated on both sides, which means a further heavy diminution in transparency. The exhibition also showed how the science of ventilation is adapting itself to black-out conditions. Intake ventilators were shown which can be fixed to glass, wood, or metal. One special contrivance fixed to a window frame permits the window to be partially open during black-out. There are ingenious vents in the pelmet and cowls arranged in such a way as to provide the maximum of ventilation while observing the lighting regulations. If the ideas find wide adoption the third war winter should see the problem of interior stuffiness solved.

Local News

ENGLAND AND WALES

London School of Hygiene and Tropical Medicine

A report on the work of the London School of Hygiene and Tropical Medicine, which incorporates the Ross Institute, has been made for the year 1939-40. Since the end of the period covered by the report Sir Wilson Jameson has resigned his post as dean on his appointment as Chief Medical Officer of the Ministry of Health, and Lieut.-Colonel G. S. Parkinson has been appointed dean for the duration of the war. The war has seriously affected the work of the school, but programmes of research have been carried out as well as a limited amount of teaching, and short intensive courses have been given for persons about to undertake service in the Tropics. The department of clinical tropical medicine suffered a serious blow when the Hospital for Tropical Diseases was closed on the outbreak of war, but as a temporary measure ten beds were allocated at the Dreadnought Hospital, Greenwich, for cases of the type which previously had been admitted to Gordon Street. The Dreadnought itself has since been damaged, so that other provision for the teaching of clinical medicine has had to be made. The department of parasitology has been transferred to St. Albans, where an investigation on subclinical helminthiasis in Great Britain has been continued, as well as other studies. Investigations on lice have occupied the department of entomology, and the use of modern insecticides in controlling lice has been carefully examined. In the department of epidemiology and vital statistics a great deal of statistical work relating to air-raid casualties has been undertaken. In the public health department the behaviour of the skin, especially in relation to the effects of clothing, has been one of the subjects of study, and workers in this department have also assisted in the Medical Research Council's extensive investigation of pulmonary disease among anthracite miners in South Wales. A certain amount of teaching has been given in the department of medical industrial psychology, especially for medical men taking up work in industry, and for industrial nurses. The Ross Institute has also maintained its activities very well throughout the year in spite of great difficulties. In the earlier part of the year the director of the institute, Sir Malcolm Watson, visited India and West Africa, and, among other matters, made an extensive study of malarial control work. A list is given in the report of nearly one hundred papers which members of the staff of the school and of the Ross Institute have contributed to scientific journals. The accounts show a substantial surplus on the year's working, thanks largely to the generous aid of industrial concerns with interests in tropical countries.

Liverpool Psychiatric Clinic

That the war has made little difference to the activities of the Liverpool Psychiatric Clinic is revealed in the report presented to the recent annual meeting. The clinic has now, however, no paid medical personnel, and were it not for the devoted services of its five honorary physicians it would have to close down. The report states that "psychologically speak-

ing, enemy action upon Merseyside has had little direct result." A few cases have been dealt with of civil defence and armament workers subjected to prolonged and excessive stress, but it had been anticipated that concentrated aerial bombardment or even the threat of air raids might cause numerous cases of alarm, distress, or even panic. An intensive course of instruction has been given to selected volunteers to fit them as auxiliary mental health workers in such circumstances, and eighteen workers were prepared in Liverpool and warned for service, but so far—the report takes the story to the end of 1940—none of them has been required in that capacity. The new patients attending the clinic in 1940 numbered 261 and the attendances 1,710. At the same meeting Mr. D. W. Harding, senior lecturer on psychology at the University, gave an address on mental health in post-war reconstruction.

Correspondence

Obscure Nervous Effects of Air Raids

SIR,—I read with interest and can endorse Mr. Tom Harrisson's excellent clinical observations (April 12, p. 573). These are, however, not limited to air-raid casualties, as similar cases occur as sequelae to a variety of conditions, notably influenza; from a medical point of view their symptoms are mental and not neurological. Dr. Clifford Allen (May 10, p. 727) also emphasizes the frequent occurrence of mild cases of stupor, and his "reflex reaction" is reminiscent of the behaviour of patients who endure a minor operation, then collapse a minute or so *after* the last bandage is in position.

My experience of the pathology of air-raid casualties is so far very limited; ideal material for histological examination is of course unobtainable, since death itself is a more advanced state than concussion. I have, however, come to the conclusion that the pathology of both immediate and remote effects is essentially vascular. One of my air-raid casualties had gross vascular lesions in the brain stem and at the large nerve roots (optic chiasma)—obviously due to severe tissue stretching along the spinal axis. Another casualty did not show such localization, but had a fractured lumbar spine. The brains from these cases and from some intracranial pressure experiments on animals all showed defective staining with the benzidine technique. This defect I attribute to a tissue acidity from anoxia, which arises when the vascular network is deformed, since the stretching acts as a mechanical irritant in causing capillary constriction. Neurone function is not affected by this stretch. I have recently shown that conduction in the frog's nerve is unimpaired by severe stretching even up to the moment of rupture of its muscle attachments.

When the tissues about the posterior hypothalamus are stretched (with resulting capillary constriction) unconsciousness results (Bailey); and it is logical to conclude that if the return of consciousness is delayed, partial, or associated with mental changes, many such constricted capillaries have failed to reopen properly. An effective blast wave has a pressure of from twice to a hundred times that of normal blood pressure, so that not only deformations of tissue with stretching and capillary constriction occur but also undue and partially irrecoverable distension of larger cerebral vessels are histologically demonstrable (for example, rupture of the elastic or muscle coat of the arteries; rupture, dilatation, and stasis in the veins).

Depending upon the extent and locality of these combined lesions and their vascular sequelae, labile sensori-motor associations are disturbed, resulting in abnormal behaviour which sometimes resembles that of post-lethargic encephalitis as noted by Dr. H. Crichton-Miller (April 26, p. 647). I have no doubt that such pathology would be enhanced and maintained by chronic nasal sinusitis in a manner similar to that by which such toxi-infective conditions produce cerebral vascular lesions in mental disorder cases.—I am, etc.,

Birmingham, May 15. F. A. PICKWORTH.

SIR,—In his letter (May 10, p. 727) Dr. Clifford Allen has suggested that concussion can be caused by blast, and that damage to the cribriform plate and nasal sinuses may occur sufficient to allow spread of infection to the meninges. This latter suggestion is very important, but I cannot agree with the former. Investigations on the effects of blast on the central nervous system have been pursued at the same time as the other studies on the effects of blast carried out for the Research and Experiments Department of the Ministry of Home Security under the direction of Professor S. Zuckerman. We have never seen any signs of unconsciousness in any of our surviving animals even within 10 seconds of exposure. A monkey which had suffered lung damage which caused death from pulmonary oedema in two hours was immediately capable of co-ordinated activity. Some of our animals have shown signs of fright and have refused to feed for a few hours after exposure, but their behaviour has been otherwise normal. On the other hand, there is no doubt that a recognizable picture of concussion can be produced in animals by impact.

The results of a specially conducted survey of air-raid casualties have shown that concussion does not occur apart from the impact of the skull with a solid object. A feeling of being "dazed" is common, but this, without retrograde amnesia and without a period of unconsciousness, does not constitute concussion.

Blast, in fact, does not "act like a solid body." Where it encounters an air space in which the pressure cannot change as rapidly as the pressure outside it, the walls of the air space will be distorted and may break. This is equally true of the windows of a room and of the tympanic membrane as a wall of the middle ear. We have suspected that it may also be true of the nasal sinuses and air passages, to which pressure may be transmitted by the relatively incompressible tissues of the head. Thus damage to the cribriform plate might occur without the impact of a solid body. The existence and importance of this effect are under investigation, and we are indebted to Dr. Clifford Allen for his suggestion of its clinical importance.—I am, etc.,

University Laboratory of Physiology, Oxford, May 13. D. WHITTERIDGE.

Renal Complications of Sulphapyridine

SIR,—We had a similar case in 1940 to those mentioned by Major F. R. Fletcher (February 15, p. 242), Mr. J. C. Leedham-Green (April 19, p. 586), and Dr. J. Rowland Hughes (May 10, p. 730). A man aged 44 developed acute influenzal pneumonia. In three days he received 12 grammes of sulphapyridine, and was much better on the evening of the third day. At 8 a.m. on the fourth day he developed violent pains in both loins, passed two ounces of blood-stained urine, and then had complete anuria. This lasted for twenty-four hours. He was to be admitted to hospital, when we gave him 40 grains of potassium citrate orally. Two hours later he passed 40 ounces of blood-stained urine, and from that time his kidneys functioned quite normally. Unfortunately ten days later he developed an empyema and had to have a rib resection but after a stormy convalescence he made a good recovery. It might be worth while to use potassium citrate orally before trying intravenous medication in such cases.—We are, etc.,

JAMES HANNAN, M.B., Ch.B.
HAMILTON F. MOFFIT, L.R.C.P.&S.I.

Aberdare, May 14.

Tuberculosis in the Army

SIR,—In a communication in the *Journal* of March 22 (p. 441) Major G. D. Kersley, discussing pulmonary tuberculosis in soldiers, makes the following statement: "Cooper (1940) says that 5% of recruits to the 6th Division of the A.I.F. were turned down by medical boards on account of phthisis and that another 0.9% were later discovered by microradiography, of which over half appeared to be active." This suggestion—that of every twenty Australian men of military age one should be suffering from phthisis, diagnosable by medical boards presumably not using mass radiography—appeared to me to be so remarkable that I looked up once more Cooper's excellent paper (*Journal*, August 24, 1940, p. 245), abstracted in the *Bulletin of War Medicine*, January, 1941, p. 179. I could find no confirmation of the figures given by Major Kersley, since Cooper claims that 0.55% of the men were found by microradiography to have active tuberculosis; he does not say how many recruits were found to be tuberculous by the medical boards. The figures given by Major Kersley suggest that far more cases of tuberculosis are detected by clinical examination than by microradiography, whereas precisely the opposite impression is given by Cooper's

years, has lost an ardent admirer and a picturesque personality. Two decades ago Dr. Kelly came south in retirement from a strenuous and exacting professional life, which had taken its toll of health and strength. He soon found that in the surroundings of his beloved Bournemouth health and vigour were restored and life began again to be joyous and worth-while. In his professional capacity Dr. Kelly had the gift of imparting confidence and reassurance while, at the same time, he was a great assessor of the verities behind his patients' condition. He added to his methodical and painstaking nature a high endeavour to keep abreast, despite a busy life, with the varying and advancing research and technique of his profession. He had been a member of the British Medical Association for fifty-two years and to the last was a faithful reader of the *British Medical Journal*.

One of the few nonagenarians in the medical profession has passed away with the death of DR. PHILIP LANCASHIRE BOOTH of Barrow-in-Furness. Dr. Booth was born in Manchester in 1849 and received his education at Owen's College. He qualified M.R.C.S. in 1873, and in the following year was appointed house-surgeon at North Lonsdale Hospital, Barrow, then a very unpretentious wooden building, and now a modern hospital of 154 beds. Very soon he bought a practice and settled down in that town, which was then rapidly developing as a mining and industrial centre, and there and on the adjacent island of Walney he practised for not far short of seventy years. Dr. Booth was a member of the British Medical Association from 1877 onwards, and was chairman of the Furness Division in 1932-3. But he had no ambition to be other than a local medical practitioner, serving the North Lancashire folk whom he knew so well. He was honorary surgeon to the North Lonsdale Hospital down to his death. His only outside interests were in Freemasonry, in which he attained high Provincial rank, and choral societies and church choirs, in which he took an active part from boyhood right into old age. It is possible that he was the oldest doctor in practice in England.

Dr. CHRISTABEL LILIE MARGARET GWYNNE-JONES (née Charlesworth) was killed by enemy action in one of the recent air raids on Plymouth. She was the wife of Surgeon Commander T. Gwynne-Jones, R.N., who seems to have been on duty in Devonport Dockyard at the time and so escaped. Her maid, Dorothy Remick, was killed at the same time. Dr. Christabel Gwynne-Jones was educated at Glasgow University, where she graduated as M B. and Ch.B. in 1921, and at King's College, London, also taking the M.R.C.S. and L.R.C.P. diplomas in the same year.

Universities and Colleges

UNIVERSITY OF OXFORD

Miss Ida Mann, D.Sc., M.B., F.R.C.S., has been appointed to the Margaret Ogilvie Readership in Ophthalmology from October 1.

UNIVERSITY OF CAMBRIDGE

At a Congregation held on May 12 the following medical degrees were conferred:

M.B., B.CHIR.—By Proxy: D. Laing, E. J. C. Kendall.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

At a meeting of the Royal College of Surgeons of Edinburgh, held on May 14, with Dr. H. M. Traquair, President, in the chair, the following, having passed the requisite examinations, were admitted Fellows:

G. J. Cleland, G. J. A. Kirkpatrick, F. B. Korkis, J. C. Milne, D. M. Nundy, Marion A. Pearson, O. McC. Spence, W. J. Watt.

The Henry Arthur Dalziel Ferns Bursary was, after a competitive examination in organic chemistry in its application to medicine, awarded to Mr. N. Meleca.

The Ivison Macadam Memorial Prize was, after a competitive examination in inorganic and organic chemistry in its application to medicine, awarded to Miss Mary McDonald.

The Bathgate Memorial Prize was, after a competitive examination in materia medica and therapeutics, awarded to Mr. E. D. Cameron.

Medical Notes in Parliament

Medical Man-power and Alien Doctors

The question of the Government's treatment of alien doctors in relation to medical man-power was raised by Sir HENRY MORRIS-JONES in the House of Commons on May 13. He contended that there had been a good deal of chaos and muddle in dealing with the matter. Last January there were 1,400 alien doctors in this country, and roughly only 100 had found employment. The fault lay with the multiplicity of Government and Service Departments and Refugee Committees. The Central Medical War Committee had an inadequate staff to deal with the matter, and he was told that there was only one official to deal with this question at the moment. There was also serious delay at the Aliens Department of the Home Office, which was causing a hold-up. This Department was the bottle-neck. It would take three years to absorb these alien doctors at the present rate. Some hospitals had appointed alien doctors, as they could not get other medical assistance, and sometimes it had taken two months to get sanction from the Home Office to do this. It was now announced that we were to take 1,000 American doctors into the R.A.M.C. While he believed in Anglo-American co-operation, we should not shout from the housetops about asking them to come here and then do an injustice to those who had been here for so long. We should not discourage these American doctors by putting them into the R.A.M.C. to clean instruments for a few hours a day, but should see that their skill was made use of in the best possible way. Our medical man-power was very badly distributed at present, and in rural areas it was often impossible to find a medical man to attend even a confinement case. The R.A.M.C. seemed, owing to the peculiar character of the war, to have an avaricious appetite for medical personnel, although there was not much work for them to do. The Central Medical War Committee had done very valuable work in the war, but the whole question had now got beyond them. The Minister of Health ought to take the matter into his own hands and appoint committees in each county or each county borough of over 250,000 population. The committee should comprise a representative of the British Medical Association, a responsible public man from the county, and representatives of the trade unions and employers.

Sir FRANCIS FREMANTLE pointed out that the Central Medical War Committee was set up by agreement with independent bodies like the Royal Colleges of Physicians and Surgeons, and direct representation was given to those bodies. It was probably the most representative body of the medical profession that could be got. It was obviously a great deal better for a question like this to be dealt with by the profession as a whole than to be taken over by a Government Department. The Central Medical War Committee was as conscious of the difficulty of the alien doctors as anyone else, and was as keen as Sir Henry Morris-Jones to use these people. There was no lack of good will—certainly not consciously. With regard to the suggestion that the Ministry of Health should take over the whole of the work and appoint local committees, he pointed out that Local Medical War Committees already existed in each area, which gave up their time to the very unpleasant work of deciding among their own colleagues whom they would root out from their practice and compel to serve. Continuing, he said it was not so easy as it might seem to employ alien doctors. Most of them could not talk English or, if they did, it was broken English. It was very difficult for them to understand the ways of the British medical profession and still more difficult to understand British patients in order to prescribe for them. It was difficult for them to use the organization to which they were to be appointed and the conditions and circumstances in which they had to recommend the application of their advice to their patients.

Prof. A. V. HILL said that we had been unexpectedly fortunate so far during the war in the matter of our public health, but we must not assume that our present good fortune would necessarily continue. Britain's medical resources were taxed to the utmost. In ordinary times we might have enough doctors as we were organized—that was, for dealing with disease only; but we should not have more than from one-third to two-thirds of the doctors wanted if health were to be regarded

as the essential thing and not the treatment of the disease only. In wartime, even more than in peace, we had to think ahead. We knew that 3,000 deaths from diphtheria and 60,000 cases annually could be abolished if only we could think ahead, if the Government and the people were not so complacent, and doctors were available to carry out the necessary immunization. If we were to avoid disease then far more doctors were required. For this reason we could only welcome with gratitude the promise of the United States to send 1,000 doctors to help us. It was appalling that we should have 1,300 doctors from Europe unemployed of the 1,400 available. The story that our people would not accept these doctors and that the hospitals did not want them seemed to him to be nonsense. Many Czech doctors spoke English well and had great professional knowledge and skill. The people who raised these objections were often disguising their own prejudices by referring them to the common people. Actually, little objection to the employment of alien doctors was openly voiced by the medical profession and practically no objection by our people.

GOVERNMENT REPLY

Miss HORSBRUGH, replying to the debate, said that in the employment of alien doctors they had to make certain that the doctor had skill and that his training was what he professed it to be. If he was to go into the hospitals it was natural that one must check these things. We had also to check that he was loyal to this country. The arrangement by which Allied doctors would be welcome to serve in our hospitals had been working for about four months. She did not say that the number already employed was satisfactory, because she thought the machine had got into action too slowly. She believed that the number of alien doctors was 1,350 and that now 200 or 250 were being employed. Fifty-nine doctors obtained employment at a hospital first and then their credentials were checked. The names of 333 were sent in to the Security Department and arrangements were made for 224 of that number. Then 126 were registered with the General Medical Council and she thought they were in employment, while 98 remained in the pool that had now been created. Their bona-fides had been examined and they were awaiting employment. The main scheme had been slow, but we had increased the pace, and the numbers now coming through from the Home Office Department were at the rate of about 100 a week. A great many were specialists, and it was not always possible to employ them in their own specialty. Doctors were wanted most for junior positions in a hospital, but some of them would not be suitable for such posts. Others, by reason of part-time work and studies, could not give their whole time. The Ministry was very anxious that they should be employed.

She welcomed the 1,000 doctors coming from America. While the Army was in this country and troops were stationed in a particular town and had no R.A.M.C. doctors they could be attended by the local practitioners. But at any moment the troops might leave the district, and the personnel of the R.A.M.C. must be sufficient to provide for the troops when they had to move. It was not necessarily the case that the majority of the alien doctors could not speak English. A great many of them, however, could not, and one of the difficulties might be that of language if the foreign doctors were used as we hoped to use the American ones. Those who did not speak English, as well as others, found it far easier to work in the hospitals with doctors who could assist them. The trouble in dealing with alien doctors was not complacency, but perhaps a machine that had worked too slowly. The checking up had been slow, but it was a great deal better to be slow than to make a mistake as to a doctor's skill or his loyalty to the country. She hoped that the numbers of alien doctors to be employed would be 100 a week and perhaps increased to 150.

Medical Certification

On May 15 Mr. CULVERWELL asserted that absenteeism and the transfer of labour were facilitated by the ease with which medical certificates could be obtained. He asked Mr. Bevin to ensure that doctors granted such certificates only for genuine cases of sickness or physical disability. Mr. BEVIN said he received representations on the ease with which medical certificates were alleged to be obtainable in certain cases. He proposed to consult Mr. Ernest Brown on the matter. In his Department certificates given by medical practitioners in their private capacity were not necessarily accepted as conclusive. An independent medical examination was required when this seemed necessary. Mr. CULVERWELL asked Mr. Bevin to secure the co-operation of the British Medical Association in checking "this abuse." He also asked him to ensure wide publicity for his reply. Mr. SHINWELL asked Mr. Bevin to go into the matter carefully in view of the slur cast on the workers.

Mr. BEVIN replied that he was going into the matter. Under the Essential Work Order it was possible to test the facts. He was satisfied there was at least *prima facie* evidence that, in giving panel certificates, there had not been the care which ought to have been exercised. The genuineness of any medical certificate could be examined by the Ministry of Labour. He reminded the House that constant building up of more forms of medical boards involved a great deal of organization for what might be a comparatively few cases. In his view the medical profession, "like every other trade union," ought to accept their responsibilities. Sir FRANCIS FREMANTLE said the medical profession was not a trade union and had never been.

Horseflesh in Popular Foods

Mr. ERNEST BROWN said on May 13 that to some extent there was an admixture of horseflesh with beef in various articles of popular consumption. Apart from the general provisions of the Food and Drugs Act, 1938, for the protection of purchasers, including those relating to labelling, the Act contained detailed provisions relating to the sale of horseflesh and articles of food containing it, the administration of which was a matter for the local authorities.

Differential "Iron Rations."—Major LLOYD GEORGE, replying to Miss Rathbone on May 7, said he and his advisers had not worked out, in terms of the available commodities, the minimum "iron rations" necessary to sustain in full health and efficiency heavy workers, adults other than heavy workers, children, and infants, respectively. It was the considered policy to allow the maximum possible ration to all rather than differential rations to particular categories. He was satisfied that the diet that could be obtained under existing conditions was adequate. Difficulties of distribution would be insuperable if the rationing system were calculated to ensure that everyone could secure the approximate equivalent of his appropriate iron ration and no more. He added that plenty of information on iron rations was available in the Ministry of Food.

The Services

ARMY AWARD

The D.S.O. has been awarded to Lieut. (Temporary Captain) Thomas Victor Somerville, R.A.M.C., and he has also been mentioned in dispatches for distinguished services in the Middle East.

CASUALTIES IN THE MEDICAL SERVICES

ROYAL NAVY

The death is announced of Surgeon Lieut. JOHN MORTIMER WATSON, R.N.V.R., the younger son of Dr. and Mrs. H. A. Watson of Worcester, at the age of 27. He received his medical education at King's College Hospital and qualified M.R.C.S., L.R.C.P. in 1938. He had held the post of senior resident medical officer at the Royal Buckinghamshire Hospital, Aylesbury, and was house-surgeon at King's College Hospital.

Surgeon Lieut. GEORGE THEODORE ROBERTSON WATT, R.N.V.R., was killed by enemy action when his ship, H.M.S. *Wryneck*, was sunk in the Aegean Sea during the recent evacuation from Greece. He was the eldest son of Dr. Theodore Watt and was educated at Aberdeen Grammar School and at the University of Aberdeen, where he graduated M.B., Ch.B. in 1936. After qualifying he held resident posts at Aberdeen Royal Infirmary, Mount Vernon Hospital, Northwood, Aberdeen Maternity Hospital, and at the Jessop Hospital for Women, Sheffield. He joined the R.N.V.R. in June, 1940, when he was posted to the destroyer *Wryneck*. He had been a member of the British Medical Association since graduation.

DEATHS IN THE SERVICES

Colonel WILLIAM SOUTHWICK WILLMORE, I.M.S. (ret.), died suddenly at Churt, Surrey, on May 3, aged 68. He was born on August 7, 1872, was educated at Birmingham and at St. Thomas's Hospital, and took the M.R.C.S., L.R.C.P. in 1895. Subsequently he took the D.T.M. and H. in 1907, the M.R.C.P. in 1908, and the M.D. of Durham in 1913. After qualifying he held several house appointments at Queen's Hospital, Birmingham. He entered the I.M.S. as lieutenant in 1899, attained

the rank of full colonel in 1927, and retired in 1929. Most of his service was spent in the United Provinces in civil employ, which he entered in 1903. In 1914 he was civil surgeon of Agra and principal of Agra Medical School. In October, 1914, he reverted to military duty and served with the Army until January, 1920. He was appointed professor in King George's Medical College, Lucknow, in 1922, and in 1923 civil surgeon of Cawnpore. On promotion to administrative rank in 1927 he became Inspector-General of Civil Hospitals in Bihar and Orissa, where he remained until he retired, after which he settled at Felsted in Essex, and was consulting physician to Felsted School. He served in the China War of 1900, when he took part in the relief of Peking and in the actions at Peh-tsang and Yangtsun, receiving the medal with a clasp. He had been a member of the British Medical Association for forty years and was chairman of the Mid-Essex Division in 1937.

EPIDEMIOLOGICAL NOTES

Infectious Diseases for the Week

The incidence of the common infectious diseases in England and Wales, with the exception of whooping-cough, showed only slight variations from that of the previous week. In Scotland the notifications of whooping-cough and dysentery have increased 100%, and a considerable increase has occurred in the incidence of cerebrospinal fever and typhoid fever. The number of cases of measles has declined by 68 for the whole country, but the returns for the individual counties showed some fluctuations: from Durham, Kent, and London over a hundred more cases were recorded than in the preceding week. The incidence of scarlet fever decreased by 35 cases during the week under review and the notifications were the lowest since last summer. A slight increase, 35, in the number of cases of diphtheria was reported in England and Wales. With the small decrease, 9, in the returns for Scotland the incidence of this disease reached the lowest level of recent months. The relatively large increase in enteric fever in Scotland, from 45 to 75 cases, was due to an outbreak of paratyphoid fever in Dundee, where 55 cases were reported during the week.

Whooping-cough

A general rise in the incidence of this disease is recorded for the week under review. In England and Wales 4,187 fresh cases were notified, an increase of 619, and in Scotland 549 cases, an increase of 330. In England and Wales the increase was distributed over the whole country, the largest rises being in Surrey, Lancashire, and York, West Riding, where the totals were respectively 79, 70, and 69 in excess of those of the preceding week. Whooping-cough is not generally notifiable in Scotland, and the returns are dominated by the experience of Glasgow, which contributed four-fifths of the total cases notified in the country.

Dysentery

For the third consecutive week the number of notifications of dysentery in England and Wales has shown a fall. Only 8 further cases were recorded in the Hertfordshire outbreak, but another rise occurred in Whiston R.D., Lancs, where 15 fresh cases were notified. In Scotland the number of cases of dysentery was doubled, 63 compared with 32 in the previous week: 24 of the cases were reported from the county of Argyll, and the cities of Aberdeen and Glasgow contributed 11 and 8 cases respectively.

Cerebrospinal Fever

There was a slight decrease, 17, in the notifications of this disease in England and Wales during the week. The general trend of this disease during the past seven weeks has been to oscillate round a constant level. The rate of decline in the ten weeks following the maximum has been less than that experienced in the epidemic of last year. Isolated cases of cerebrospinal fever were reported from all over the country, but half of the total cases were from only five counties—Lancaster 54, London 22, Warwickshire 18, Yorks W.R. 39, and Glamorganshire 20. The returns for Scotland showed an increase for the second consecutive week and the total reached the level recorded in March. The largest outbreaks were those of Glasgow, 32 cases, and Edinburgh, 11 cases.

No. 17

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended April 26.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases: a blank space denotes disease not notifiable or no return available.

Disease	1941					1940 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	309	22	97	4	9	385	33	72	4	3
Deaths		2	5				5	7		
Diphtheria	912	40	213	23	26	680	37	224	44	26
Deaths	27	1	4	3	2	21	—	7	3	1
Dysentery	106	18	63		—	42	—	44		1
Deaths			—	—	—			—	—	—
Encephalitis lethargica, acute	6	1	1	1	—	6	1	—	—	—
Deaths		1	—	—			1	2	—	
Enteric (typhoid and paratyphoid) fever	26	—	75	5	—	37	5	8	3	—
Deaths	1	—	—	—	—	1	—	—	—	—
Erysipelas			54	8	4			62	5	4
Deaths		—	—				—	—		
Infective enteritis or diarrhoea under 2 years										
Deaths	31	5	8	8	1	26	6	10	6	8
Measles	13,883	423	126		4	4,568	38	305		162
Deaths	10	2	—	—	—	8	—	1	3	1
Ophthalmia neonatorum	81	3	12		—	90	9	17		—
Deaths										
Pneumonia, influenzal*	1,095	48	16	9	3	925	69	5	12	5
Deaths (from influenza)	37	2	1	1	—	41	7	4	1	3
Pneumonia, primary			260	12				248	17	
Deaths		—		11	11		41		15	19
Polio-encephalitis, acute	2	1				2	—			
Deaths		—					—			
Poliomyelitis, acute	6	—	3		—	4	—	—		—
Deaths		—	—				—	—		
Puerperal fever	2	2	15	1	—	2	2	24	1	—
Deaths		—					—			
Puerperal pyrexia	121	3	15		4	170	13	30		2
Deaths										
Relapsing fever	—	—			—	1	—			—
Deaths										
Scarlet fever	1,021	—	117	47	25	931	38	130	57	52
Deaths	1	4	—	—	—	1	—	—	—	—
Small-pox	—	—	—		—	—	—	—		—
Deaths	—	—	—	—		—	—	—	—	—
Typhus fever	—	—	—	1	—	—	—	—	—	—
Deaths			—	—	—			—	—	—
Whooping-cough	4,187	114	549		7	646	15	42		7
Deaths	32	2	18	1	—	7	—	1	4	1
Deaths (0-1 year)	387	32	83	27	25	416	51	77	46	45
Infant mortality rate (per 1,000 live births)										
Deaths (excluding still-births)	6,770	1,798	698	208	493	5,226	849	725	237	187
Annual death rate (per 1,000 persons living)			15.2	13.8	43.2			13.1	15.8	16.4
Live births	5,258	398	914	390	237	6,530	997	980	373	279
Annual rate per 1,000 persons living			18.6	25.9	20.8			19.2	24.9	24.5
Stillbirths	209	13	30			266	31	41		
Rate per 1,000 total births (including stillborn)			32					41		

* Includes primary form in figures for England and Wales, London (administrative county), and Northern Ireland.