largely on the speed with which it was done. When patients had partly collapsed on the table dramatic recoveries had been seen on giving a pint of whole blood straight away. From the results of his cases he believed that pentothal intravenously, light percaine as a spinal, followed by nitrous oxide and oxygen, were the anaesthetics of choice.

Surgical Procedure

Lieut.-Colonel J. A. MACFARLANE, R.C.A.M.C., said that the relief of obstruction before operation was of the greatest importance. He did not agree that there should be a standard operation; each case should be considered on its merits. Patients should be in hospital for at least ten days before operation and put on a diet of non-residue fluids. If there was evidence of chronic obstruction when the abdomen was opened there should be no hesitation about dividing the operation into two stages, changing one's mind and doing a colostomy, and leaving the patient for a further period of two weeks during which the distal loop should be washed daily. In acute obstruction it was his experience that colostomy as an immediate procedure carried with it a high mortality, and it was his practice to do a blind caecostomy under a local anaesthetic, which got the patient over the emergency and left time for thorough investigation and planning of the best operation for the type of case.

Mr. LAWRENCE ABEL was interested to find that Col. Macfarlane's procedure was so closely parallel with his own. He agreed with what he had said about getting the bowel clean before operation, and his experience was that if the tongue was clean the bowel was clean. No patient who had had a laparotomy should be allowed to drink anything at all until the bowel began to move; water, salt, and sugar should be given by the intravenous route. He recommended the use of fractionated rather than distilled water. A point which had not been mentioned was the question of moving the patient: the more ill the patient the more quickly he should be moved out of bed. The average case with tubes should be moved out of bed a little over twenty-four hours after operation, if only for a few moments, and on the second day for a longer period, and then remain in bed for twenty-four hours.

In some further discussion Dr. MOLLISON pleaded for the use of whole blood rather than plasma or serum; Mr. E. T. C. MILLIGAN mentioned factors which made for speed in operation; Mr. TURNER WARWICK spoke of the importance of guarding against bladder infection; and Mr. DICKSON WRIGHT spoke of the value of dusting the wounds with sulphanilamide powder. In some recent cases he had used a sulphonamide gelatin with excellent results. One advantage was that the patient absorbed the substance into the blood stream and urinary complications were prevented.

Local News

SCOTLAND

Tuberculosis Campaign in Scotland

At the recent annual meeting of the Royal Victoria Hospital Tuberculosis Trust, Edinburgh, Prof. Charles M'Neil, who presided, said that when one looked at the figures for tuberculosis it might seem as if the disease had been conquered. That easy optimism was never entertained by the late Sir Robert Philip, who founded the Trust, nor was it entertained by the executive of the Trust to-day. While the family tragedies which once occurred were now rare, the minute seeds of the disease were still sown within the family, and preventive medicine was addressing itself to the early eradication of infection. Sir William Carnegie said that the executive believed that suitably equipped sanatoria ought to be distributed all over Scotland to work in conjunction with the local authorities. In the annual report of the Trust, which was adopted at the meeting, it was urged that statutory recognition should be given to "care work" in Scotland, including measures to assist the patient before he went into hospital, to help his family, and to consolidate his recovery. This was a special field for voluntary organizations to work in liaison with the official services.

A Comparison between Two Cities

Glasgow and Birmingham are of almost the same population—just over a million—and in an address to the Scottish Branch of the British Hospitals Association recently, Mr. T. W. Place, honorary secretary of the Contributory Schemes Association, used this fact to make a rather telling comparison in favour of contributory schemes. He said that the amount handed to Glasgow hospitals in 1939 was almost the same as that handed to Birmingham hospitals in the year 1926 before the introduction of the contributory scheme—namely, £100,000. But in 1939 the Birmingham hospitals received over £250,000 from the contributory scheme, and in addition paid some £60,000 to hospitals outside the city for treatment given to patients. In 1939 the Glasgow Royal Infirmary received about £34,500 in workers' contributions, plus another £22,000 from general subscribers, whereas in Birmingham the amount handed over to a comparable hospital was £80,000, with another £10,000 from subscribers. The differences were, in his view, an unanswerable case for setting up a contributory scheme in Glasgow. It was mentioned at the same meeting that all the regional committees with the exception of Dundee had approved generally of the proposals for the regionalization of voluntary hospitals, and the scheme was being extended to include hospitals under local authorities.

Incidence of Rheumatism in Scotland

In an address at the annual meeting of the Edinburgh Cripple and Invalid Children's Aid Society, Prof. L. S. P. Davidson said that if some investigations of the incidence of rheumatism in the north-east of Scotland held good for the whole country then 300,000 persons in Scotland went to their doctors annually for treatment for rheumatism of one kind or another. Perhaps 60% or 70% suffered from the simpler forms of muscular rheumatism, but a large proportion were very seriously crippled, and from 50,000 to 60,000 persons in Scotland were crippled so completely as to be unable to work for at least sixty days in the year. He drew attention to the inadequacy of hospital treatment available for chronic rheumatic disease. Probably not more than 10% of those suffering from this condition could depend upon adequate institutional facilities.

ENGLAND AND WALES

The Birmingham United Hospital

The report for 1940 of the Birmingham United Hospital, which includes the General and Queen's and the Queen Elizabeth Hospital, has now been published. When the effects of air bombardment began to be felt the Board decided that the General and Queen's Hospitals should be organized as casualty clearing stations and that the bulk of the normal civilian work should be concentrated at the new hospital. Nearly 600 beds are now constantly in use at the Queen Elizabeth, whose steel fabric and isolated site render it comparatively safe. At the General Hospital, in collaboration with the Ministry of Health, a system of frequent and rapid evacuation has been worked out by which patients are sent to the country as soon as possible after operation or the completion of other necessary treatment. By this means, though less than the half the usual number of beds is available, the General Hospital actually dealt with a larger number of in-patients in 1940 than in 1939, and the number of operations in the various theatres increased by over 5,000 in the year, this increased surgical work being due mainly to accidents in the black-out and in factories. During the year under review air-raid casualties were treated in the United Hospital. It is stated that the work of the first-aid and rescue parties and of the ambulance service in Birmingham has been excellent. The hospitals receive casualties very soon after the bombs have fallen, and the casualties have been handled well and carefully, with no harmful interference. The Board of the United Hospital has therefore decided that, at no matter what cost, it will continue to provide a casualty service in the centre of the city, so that the wounded may be efficiently treated without the delay and discomfort of journeys to other areas. The buildings of both the General and Queen's are old and fragile, and, deeming it necessary to have some premises in reserve, the Board have taken the basement of some business premises for use as an operating theatre, with three

tables, an *x*-ray room, and a sterilizing plant. This emergency hospital is seventeen feet below ground, with seven floors of steel framework above it, and is ventilated by a forced intake of air. The Board has also assumed responsibility for an outlying subsidiary hospital for convalescent patients.

Salaries of London District Medical Officers

The London County Council is revising the salaries of officers of the district medical service. The proposals of the Hospitals and Medical Services Committee provide, with a few exceptions, for a general reduction in salaries and allowances consonant with a general diminution in the work throughout the county of London. In eight districts, however, the work has been found to have increased, and increases of salaries of two district medical officers and six assistant officers appointed to those districts are proposed. Under the Public Assistance Order, 1930, the consent of the Minister of Health must be obtained before the remuneration of a senior Poor Law officer is reduced, and three months' notice of such reduction must be given to the officer concerned. In cases coming within this provision the revised salaries and allowances will operate from September 1 next for one year or until any reorganization of medical relief districts necessitates their revision ; in the remaining cases the proposed effective date is July 1. The reductions of salaries apply in seven cases, and in six of these the provisional allowances are wiped out. The provisional allowances granted to twenty-eight district medical officers are reduced, as are the provisional salaries of forty-three assistant medical officers. Some of the reductions are quite considerable: for example, a salary of £300 is reduced to £165, another of £300 to £210; provisional allowances are reduced, in one case from £165 to £55, in another from £225 to £120, in a third from £124 to *nil*. The largest addition to salaries or allowances proposed is from £225 to £310. The proposals are estimated to result in a saving to the Council of just over £5,000 a year.

Correspondence

America and British Science

SIR,—Some of your readers may have seen my letter to the *Times* of June 20, on the generous gifts recently made to the Royal Society by scientific societies of the United States of America—an earlier one of 10,000 dollars from the American Philosophical Society " for the aid of science in Britain," and now, last week, a gift of 5,000 dollars from the American Physiological Society " for the support of scientific publications in Britain, especially in physiology."

A natural and helpful comradeship between medical men of different countries has always been at least as strong among the physiologists as among those whose work is in other branches of medical science or practice. Certainly we British physiologists are on terms of sufficient intimacy with our American colleagues to know well that the American Physiological Society, like our own, depends for existence and support on the efforts and the contributions of members who are working men of science. Their gift will assuredly have a direct importance for the object which they named in making it; but while we gratefully recognize its immediate and intrinsic value, we shall not miss the wider meaning of the fraternal impulse which determined this fine and generous action. We shall be sure that it symbolizes a desire of our American friends to share with us, as far as national policies allow, in the losses which are being encountered in defence of ideals which are theirs as much as ours.

Such gifts, indeed, are among many signs of the fuller understanding which comes with the recognition of a common peril and a common duty An interchange of medical personnel has begun. The generosity of the Rockefeller Foundation is enabling a chosen batch of students to go to American medical schools; there must certainly be more of such interchange after the war, and in both directions. Qualified American medical volunteers are arriving in this country. Close collaboration in scientific researches more directly concerned with warfare, has for some time been a necessary and well-established condition of America's share in the equipment of our Forces. Surely it is clear that the greatest gain which can come to us, and to the world, from a war in which so much has been and must yet be sacrificed, is this closer and more conscious unity between peoples who have always been bound together, not merely because they speak the same language and share so much of history and tradition, but because their ideals and their outlook on life are, in very truth, essentially identical. To see in the promotion of such unity the best hope for the future, to work for it in every way and to guard it from the weakening effects of sectional aims and factitious differences, seems to be the best acknowledgment that the medical and scientific men of Britain can at present make to the American colleagues who, with a noble and simple generosity, are showing their desire to be identified with our cause.—I am, etc.,

Hampstead, June 22. H. H. DALE.

Crush Injuries

SIR,—In your issue of March 22 there appeared three papers by Bywaters and Beall; Beall, Bywaters, Belsey, and Miles; and by the M.R.C. Subcommittee dealing with crush injuries suffered during air raids that were followed by renal failure and, in many cases, by death from uraemia. A leading article in the same issue drew attention to these so far inexplicable phenomena and called for animal experiments to elucidate them. In these articles the work of E. Andrews of Chicago (*Arch. int. Med.*, 1927, **40**, 548) appears to have been overlooked. Andrews worked on renal and metabolic problems of acidosis, which he induced by giving large quantities of hypertonic NaCl solution to dogs intravenously. During these experiments he accidentally tied a limb of a dog too tight to the operating table so that it became oedematous. On releasing the leg and massaging it immediate and complete anuria set in, followed by a rise of blood pressure, nitrogen retention, coma, convulsions, and death. At necropsy oedema of the brain was found, but no renal lesions were present. The experiment was frequently repeated and identical results were obtained. When the suppression of urine was not complete the urine contained albumin and granular and hyaline casts. The author believes that faulty carbohydrate metabolism in the affected limb was responsible for the results. Andrews also observed simultaneously with the anuria a considerable movement of calcium out of the cells in favour of potassium. On this was based an attempt to counteract the process by giving massive intravenous doses of calcium, and thereby he was able to institute immediate diuresis with subsequent recovery of the dog.

All the human cases of crush injury under air-raid conditions can be said to suffer from acidosis induced by starvation and exhaustion. In the paper by Bywaters and Beall a lowered alkali reserve was in fact observed and taken for an indication to stop further saline administration. All the reported cases showed considerable oedema of the crushed extremity. Thus, the parallelism of these cases with the experiments of Andrews appears rather convincing, and his attempt at reversing the condition seems to merit close attention.—I am, etc.,

London, W.1, June 15. G. SCHOENEWALD.

Da Costa's Syndrome

SIR,—Dr. Paul Wood has rendered an important service by the publication of his Goulstonian Lectures. It may be hoped that they will assist medical officers in the Services and members of Ministry of Pensions Medical Boards in dealing with these difficult cases, which can no longer (as in the last war) be classified simply as " V.D.H." or " D.A.H."

Dr. Wood has enumerated the aetiological factors that have been described by various authors, but it may be doubted whether many of these writers had much " first-hand " knowledge of the soldier's life. No one doubts that personal and family histories are of great importance, but there were many other factors in the last war that conduced to the production of Da Costa's syndrome, and, apart from deliberate attempts to obtain discharge from the Service by eating toxic substances—for example, cordite, soap, or tobacco—there were many other causes. One potent factor was the endeavour to train recruits (too often entirely unaccustomed to physical exercises in civil life) in the minimum time. The instructors were usually hard-bitten old soldiers who showed their contempt for " conscripts " by shouting: " I'll make you or break you."

Another aetiological factor was excessive smoking, especially before breakfast. I have often seen recruits going down to

The Services

NAVAL AWARDS

Surgeon Commander John Joyce Keevil, R.N. (H.M.S. *Illustrious*) has been awarded the D.S.O. for great courage and devotion to duty in the face of enemy air attack.

Surgeon Captain J. Martin, R.N. (ret.) has been awarded a Greenwich Hospital Pension of £50 a year in the vacancy caused by the death of Fleet Surgeon J. H. Acheson, R.N. (ret.).

Temporary Surgeon Lieut. Thomas Tibbott Davies, R.N.V.R. (H.M.S. *Illustrious*) has been mentioned in dispatches.

AUXILIARY R.A.M.C. FUNDS

The annual meeting of the members of the Auxiliary R.A.M.C. Funds will be held at 12 noon on Friday, July 11, at 11, Chandos Street, Cavendish Square, W., when the annual report and financial statement for the year ended December 31, 1940, will be presented and the officers and committee for the current year elected.

CASUALTIES IN THE MEDICAL SERVICES

ROYAL ARMY MEDICAL CORPS

Missing

Captain Nicolas Shtetinin Seaford.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

The following candidates have been approved at the examination indicated:

FINAL M.B.—*Part I (Surgery, Midwifery, and Gynaecology)*: R. M. Archer, J. D. Atwell, R. C. Barclay, D. V. Bateman, K. F. C. Brown, L. J. H. Burton, H. Butler, W. H. Chase, R. E. W. B. Comerford, E. D. Cullen, P. M. Daniel, B. Dansie, F. M. P. Eckstein, E. J. S. Evans, C. L. Grandage, R. E. A. S. Hansen, D. V. Harris, A. Holmes-Smith, E. B. Jarrett, R. Jenkins, J. S. Johnstone, K. H. Lim, L. R. McLaren, H. L. McMullen, J. M. Mungavin, P. H. Nash, T. P. Pattinson, A. G. E. Pearse, G. E. Pinkerton, G. K. Riddoch, P. Sainsbury, J. L. S. Smith, A. G. Stansfeld, J. H. Tasker, H. D. Teare, D. E. Thompson, D. G. Vulliamy, A. Waymouth, H. G. Wolskel. *Women:* H. M. Comely, A. Davies, D. H. King, M. Redfern Davies.

UNIVERSITY OF GLASGOW

William John Brownlow Riddell, M.D., D.O.M.S., has been appointed to the Tennent Chair of Ophthalmology from October 1, in succession to Prof. A. J. Ballantyne, who retires under the age limit.

Medical Notes in Parliament

Mental Hospital Staffs

On June 17 Mr. SORENSEN asked the Minister of Health whether he was aware of the increasingly serious situation in mental hospitals through the withdrawal of male nurses to the Forces, and if he was considering the possibility of an extension of the Essential Works Order to cover the need of these hospitals. Miss HORSBRUGH replied that as regards withdrawal of male nurses for the Forces, no change had been made in the Schedule of Reserved Occupations. Male nurses over 30 were not called up, and those under 30 were called up only for service in their profession. Applications for deferment of individuals received full consideration by the Minister, and in suitable cases recommendations for deferment were made to the Ministry of Labour and National Service. The Essential Works Order did not affect military service, but the Minister had under consideration the question whether an order of similar effect should be made in respect of mental hospitals.

Committee on Medical Man-power

Sir Francis Fremantle was informed by Mr. ERNEST BROWN on June 19 that Mr. Brown, the Service Ministers, and Mr. Johnston had decided to set up a committee to investigate, in the light of the recommendations of the committee presided over by Sir Arthur Robinson, what further steps could usefully be taken to secure the utmost economy in the employment of medical personnel in His Majesty's Forces, the Emergency Hospitals Scheme, and the Civil Defence Services, and all other medical services, including general practice. This committee was to report from time to time what should be the allocation between these services of the available medical personnel. It would begin its work at once. Its members were: Mr. Geoffrey Shakespeare (Parliamentary Under-Secretary for the Dominions), chairman; Prof. R. M. F. Picken, M.B., D.P.H.; Sir Alfred Webb-Johnson, F.R.C.S.; J. Crighton Bramwell, M.D., F.R.C.P.; Prof. Sydney Smith, M.D., D.P.H.; J. A. Brown, M.D.; William Malcolm Knox, M.B., Ch.B.; and medical representatives of the Admiralty, the War Office, and the Air Ministry. In addition the following agreed to be closely associated with the work of the Committee: Sir Charles Wilson, M.D., P.R.C.P., Sir Hugh Lett, Bt., P.R.C.S., and H. S. Souttar, C.B.E., M.D., F.R.C.S. (chairman of the Central Medical War Committee).

Mr. RHYS DAVIES asked if the committee would inquire into the difficulties of panel practice in National Health Insurance. Mr. BROWN replied that the terms of reference were wide.

Medical Advisory Committees

Mr. GROVES asked on June 19 how many medical committees, advisory or executive, were referred to by Mr. Brown in the national emergency; how, when, and by whom they were appointed; and what were their constitutions. Mr. BROWN gave the following list: The Central Medical War Committee and Advisory Emergency Hospitals Medical Service Committee, the appointment and constitution of which had been set out in October and December, 1939, and February, 1941, respectively; Medical Advisory Committee on Rehabilitation, consisting of a number of specialists on this subject invited by the Minister in November, 1940, to advise the Director-General, Emergency Medical Services, from time to time on the rehabilitation of patients under the Emergency Hospitals Scheme; Standing Committee on Physiotherapy, consisting of medical practitioners with special experience of this treatment, selected in July, 1940, by the Minister's consultant advisers in collaboration with official representatives of the specialists concerned, to advise the Director-General, Emergency Medical Services, on the facilities required for this treatment in hospitals under the Emergency Hospitals Scheme; Lord Horder's Committee on conditions in air-raid shelters (with particular reference to health) appointed on September 14, 1940, jointly by the Minister of Health and the Minister of Home Security, and consisting of Lord Horder as chairman, a senior medical officer of the Ministry of Health, the chief engineer of the Ministry of Home Security, and two lay representatives of voluntary organizations.

Medicine Stamp Duties

Captain CROOKSHANK said on June 19 that before the announcement of the abolition of the Medicine Stamp Duties their yield in a full year was estimated to be £800,000. The yield of the Purchase Tax on prepared drugs and medicines might in a full year be of the order of £3,000,000. Sir KINGSLEY WOOD on the same date told Mr. Horabin that he would not consider the introduction of a Bill to legalize the administration of the Medicine Stamp Duties. The legal action brought by Messrs. Woolworth merely illustrated the difficulties to which the administration of these antiquated Acts continually gave rise. Captain CROOKSHANK said on June 18 that before the decision was announced to repeal the Medicine Stamp Duties, proposals were considered for a revised method of taxation suggested by the Proprietary Association of Patent Medicine Manufacturers.

Mr. WHITE suggested on June 19 that widespread advertising of patent medicines, often with an appeal to fear, led large numbers of people to treat their own ailments instead of using the medical services available under the National Health Insurance Acts. Mr. BROWN said he had no specific evidence than any large number of insured persons treated their own ailments instead of consulting their insurance doctors. This was among the matters considered before Sir Kingsley Wood announced the decision to repeal the Medicine Stamp Duties.

National Health Insurance.—On June 10, Mr. ERNEST BROWN told Captain Plugge that the possibility of securing economy by the substitution of a yearly health and pensions insurance contribution