Reports of Societies

INDUSTRIAL MEDICINE IN WAR TIME

At a meeting of the Association of Industrial Medical Officers held on January 26, Dr. R. E. LANE (Manchester), the newly elected chairman, presiding, a discussion on war-time problems in industrial medicine was opened by Dr. E. H. CAPEL (Birmingham) and Dr. D. STEWART (Birmingham).

Dr. Capel said the lay mind thought that output in industry might be increased by working long hours and encouraging workers to "put their backs into it." The fallacy of expecting output to increase in proportion to the hours worked was proved during the last war, and the publications of the Health of Munition Workers Committee supported the contention that overtime must be limited. He drew attention to the effect of travelling time, pointing out how often the journey to and from work was long enough to make an otherwise harmless day too long. He also called attention to the fact that many industrial hazards became greater risks when workers were over-exposed to the hazard as the result of overtime and pressure of work. For instance, the number of cases affected by lead, as judged from the punctate basophil count, rose after an increase of working hours. Night work was necessary in many industries to-day, but it had been disputed whether this should be done in short or long spells. This must depend upon local circumstances, and it was difficult to lay down rules.

Dr. Stewart said that many of their problems originated from the black-out. Ventilation and lighting assumed a new importance. Accidents happened which normally would not occur. He touched on the question of night blindness in relation to accidents, saying that it might possibly be countered by suitable adjustment of diet, and commented on the need for revision of legislation for workers' compensation, particularly the provision for adequate treatment and for the co-ordination of treatment and rehabilitation. Mr. HAROLD CLAY of the T.U.C. remarked that there was now much better co-operation between employer and employed than in 1914, and the organization of industry and the avoidance of bad conditions should be greatly facilitated as a result. He endorsed the remarks of the previous speakers on the dangers of working excessive overtime. Most workers did not like long hours, even though it meant a larger wage packet. They must remember, however, that many workers in the heavy industries had within recent times had long periods of unemployment, and the tendency to take the chance of earning good money while there was an opportunity was quite understandable. He advocated "staggered" hours to deal with the transport problem. Many workers did not object to night work, and to some the extra money paid for this was sufficient compensation for its disadvantages. Mr. R. R. HYDE of the Industrial Welfare Society said that there was a marked difference in outlook to-day compared with that in 1914. During the last war industry placed its greatest emphasis upon obtaining profits, and trade unions on obtaining larger wages. He was happy to say that in 1940 both were considering other important problems, such as the health of the worker and how this could benefit the nation. He spoke of the importance of getting industry to realize how vital was the message the medical profession had for it.

Air Vice-Marshal Sir DAVID MUNRO spoke of the interest which was being taken by important Government officials in the very problems which were being discussed at the meeting; industrial fatigue was one of these. The wage incentive must not be allowed to climb at the expense of long hours and damaged health. He stressed the importance of the industrial doctor in the safeguarding of health in industry. Mr. H. E. GRIFFITHS said that rehabilitation of the injured person should have the attention of the surgeon from the earliest stage of treatment. Occupational therapy should be arranged so that the patient was not on his own work, and any therapy or exercises given should distract the patient's attention from the injury. He found competitive games cheap and effective in re-education after injury. Professor MILLAIS CULPIN felt that many cases of night blindness were psychogenic in origin; the subject should not be given too much prominence or an epidemic of it might be precipitated. Mr. R. WATSON JONES referred to the importance of the adequate treatment of shock and of the value of a properly heated shock room for the reception of casualties. In rehabilitation the difficulty of obtaining suitable light work was a big one. "Light work" was not always satisfactory. The work provided should be suitably graded so as to offer the greatest chance of recovery. The co-ordinated treatment of industrial injuries and well-organized fracture clinics were never more necessary than at present.

Local News

ENGLAND AND WALES

Radiographers at Dinner

The Society of Radiographers held its annual dinner as usual at the Connaught Rooms, London. A large company of members and their friends, some of them from as far afield as Scotland, Lancashire, and the West of England, assembled under the chairmanship of Dr. G. W. C. Kaye, who, in welcoming the guests, mentioned that they included Lieutenant-Colonel D. B. McGrigor, president of the British Institute of Radiology, who was now Adviser in Radiology at the War Office, Mr. W. E. Schall, chairman of the Association of *X*-ray Engineers, Mr. V. E. A. Pullin, Radiological Consultant to the Air Ministry, Dr. A. E. Barclay, consultant adviser in Radiology to the Ministry of Health, and Major R. W. Gemmell and Dr. J. Blair Hartley, chairmen respectively of the Liverpool and Manchester Radiographic Societies. Colonel McGrigor, in responding, congratulated radiographers on the home front for generally making the best of things and endeavouring to carry on, though "business as usual" was not always possible or even desirable. Many of their number had had to realize that obligations entered into in peace time had now to be fulfilled. This applied not to radiographers only but to very large numbers of highly skilled technical people in all kinds of services, and he thought it well to bear that in mind when the difficulties which might arise in connexion with their work appeared unduly oppressive, and so simplify the task of those directing the campaign. These difficulties were the subject of sympathetic consideration by the authorities. Radiographers on service abroad, in spite of the absence of big events at the front, were not exactly living a life of ease. They were engaged less on pure radiography than on building up their *x*-ray departments, making them as good and efficient as possible in readiness for any occasion that might develop. They might find themselves placed in newly erected huts, or in adapted old buildings, or in tents pitched on muddy ground, in striking contrast to the environment in which they worked at home. Mr. W. E. Schall, who also responded, thought it significant that "while the dictators were screaming over Europe" radiographers, with a calm and unruffled exterior, had said, "Let us have our annual dinner." He made play with the divers occupations in which many prominent radiologists and radiographers were now engaged, and said that it seemed to him that few of the really important activities in which the nation was taking part were not being controlled by one or other of their number. Colonel J. Struthers Fulton, head of the radiology department of a hospital "somewhere in Great Britain," created amusement by mentioning the varied and at first sight unrelated duties which now came his way—these included the running of a laundry and the charge of a market garden of ten acres. He added that the radiological services in the Army were exceptionally fortunate in having at the War Office Colonel McGrigor, who had shown great foresight in planning the radiological equipment and personnel. He hoped that many of the civil radiographers he was

addressing would find their way into the Army service, where a varied experience which would stand them in good stead in their later career was to be obtained. The toast of "The Society of Radiographers" was proposed by Mr. V. E. A. Pullin, who remarked that the practice of radiography called for many attributes. It rested on a wide basis of scientific knowledge, demanded great experimental ability, ingenuity, and foresight, and above all things required patience and adaptability.

Chadwick Lectures

The following public lectures have been arranged by the Chadwick Trust: Tuesday, March 12, 2.30 p.m., at London Missionary Society, 42, Broadway, Westminster, S.W., Dr. T. N. V. Potts, "The Role of Women in the Public Health Service To-day"; Tuesday, April 9, 2.30 p.m., at the Royal Society of Tropical Medicine and Hygiene, Mr. W. H. Hamlyn, "Camps: Their Design, Construction, and Hygienic Arrangement"; Tuesday, May 21, 2.30 p.m., at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C., Professor S. P. Bedson, F.R.S., "Human Virus Infections of Animal Origin: Their Mode of Spread and Control"; Thursday, June 20, 4 p.m., at the Chelsea Physic Garden, Swan Walk, Chelsea, S.W., Professor William Brown, F.R.S., "Plant Disease in Relation to the Public." Admission to the lectures is free, and further particulars may be obtained from the secretary of the Trust, 204, Abbey House, Westminster, S.W.1.

SCOTLAND

Scottish Red Cross Society

Lord Kinnaird, chairman of the Scottish Branch of the British Red Cross Society, has received a letter from Mr. John Colville, M.P., Secretary of State for Scotland, thanking him for the society's offer to provide hospital supplies and comforts for use in hospitals included in the Emergency Hospital Scheme in Scotland. At the society's request work parties are now engaged in making bed jackets, dressing gowns, bed and operation stockings, knitted bed wraps, and over thirty other types of article.

Scottish Blood Transfusion Service

The Department of Health for Scotland announces that a council, under the chairmanship of the Earl of Rosebery, has been formed to take over and administer the Blood Transfusion Service in Scotland. Mr. John Colville, M.P., Secretary of State for Scotland, was responsible for setting up a national service at the outbreak of war, and the new council's function will be to complete the organization. The council consists of about thirty members. Its task will be to co-ordinate the work of the local voluntary committees recently set up in various centres in Scotland and to appeal to the public for money to carry on the work. In Edinburgh, Glasgow, Dundee, Aberdeen, and Inverness depots for the storage of blood have already been created. These depots can be expanded rapidly should the need arise. The Department of Health will continue to meet the cost of the service until the end of this month. Although the public will now be appealed to for funds, the State will continue to support the service.

The fifteenth annual report of the executive committee of the National Institute for the Deaf has been issued from the headquarters at 105, Gower Street, W.C.1. In a speech made at the annual meeting held on October 6 Sir Francis Fremantle outlined the many ways in which the Institute might be of service to the cause of the deaf and deafened, both combatants and civilians, during the course of the war. The report prints the inscription to the memory of Arthur John Story (secretary of the Institute from 1925 until his death on September 11, 1938) which appears on a plaque placed in the Leo Bonn Hall. It commemorates Mr. Story's unflagging zeal in the cause of the welfare of the deaf during forty-two years.

Correspondence

The Tourniquet

SIR,—Mr. Malcolm Donaldson (*Journal*, February 17, p. 273) is wise in drawing attention to dangers resulting from misuse of a tourniquet, but I am afraid he is too optimistic when he states that "fear of tourniquets is unnecessary, as in this country it is unlikely that any patient will be left for more than half an hour from the time of accident to the time that he arrives in hospital." Within the past fortnight I have been forced to amputate an arm of a man who received an open fracture of the forearm at 5 a.m., and to which a tourniquet had been applied immediately. Although the accident occurred at a place only about five miles away, it was not until 8.15 a.m. that he arrived in hospital and the tourniquet was released (needless to say, there was no bleeding when this was done). During this interval the tourniquet had been loosened on one occasion only. Primary débridement was carried out, but the hand remained cold, numb, and paralysed, and the forearm painful, and in spite of the fact that the main vessels and nerves were intact amputation was necessary the next day.

By all means use a tourniquet, but remember and teach that often a pressure bandage over a first-aid field dressing and splinting to prevent gross movement will achieve all that is necessary. If a tourniquet is applied, mark on the patient's forehead or on a label fixed to the patient the time that the tourniquet was applied, and also the time it should be released. Many lives will be saved by proper use of a tourniquet, but many limbs will be lost by its improper use.—I am, etc.,

Feb. 18. RALPH SHACKMAN.

Penetrating Chest Wounds

SIR,—It would appear that Dr. Hood has not quite grasped the drift of my observations on the "early closure" of such wounds. The value of early operation and the invaluable work done on these lines at the various casualty clearing stations is not in question. The point is whether, after operating on a case in which, owing to the nature and circumstances of the wound, the pleura has in all probability become heavily infected, it is wise to effect complete closure of the wound, or to institute some form of drainage either at the operation wound itself or by a separate incision in the postero-lateral region of the chest wall.

The subsequent history of such cases suggests that some form of drainage is advisable, and I gather that Mr. Oswald Tubbs, basing his opinion on experience of chest surgery in civil practice, thinks likewise. I quite agree that the cases of early closure mentioned by me are not sufficient to warrant one in coming to any hard-and-fast conclusion. I never suggested they were.

In reply to Mr. Oswald Tubbs, there is no doubt that deflation of lung (homolateral collapse) is accompanied by displacement of the mediastinum towards the lesion, as shown by *x* rays and the position of the cardiac apex—a point that was accidentally omitted in my paper. Though homolateral collapse may possibly be due to bronchial obstruction by mucus or blood, it appears doubtful, because the condition is more commonly associated with non-penetrating chest wounds in which there is no direct injury to the lung. I agree that it does not get us very far to say that "the lung appears to be stunned by the concussion," but I am afraid that is as far as I am able to go towards explaining the condition.

In reference to methods of drainage, if it is possible (as Mr. Oswald Tubbs suggests) to keep a long and heavy drainage tube in position by a large safety pin strapped to the chest, or in any other way to obviate the necessity of actually stitching the tube to the skin, the objection to this method, that it causes constant severe pain, would be removed, and water-seal drainage would be obviously preferable to the "glove-finger" method referred to by me. Owing to the

Medico-Legal

A DANGEROUS HAIR DYE

The question of when one man owes another a duty to take care is one of the widest in law. It cannot be answered by reciting a set of rules, but only by enumerating an almost innumerable series of decided cases. The famous "snail" case[1] laid down that a manufacturer of harmful goods may be liable to the consumer although the two parties have not come into any contact and no agreement has ever been made between them. A recent case heard by Mr. Justice Stable at Manchester Assizes[2] extended the duty to distributors of goods, and indicated circumstances in which legal liability may fall from an unexpected quarter. A gentleman used to have his hair dyed at the shop of a lady hairdresser, and never had cause to complain of her skill and care. One day she told him of a new dye known as "melereon," and showed him some advertisements of it. She said she had had no experience of its action and had not tested it. He agreed to its use, and contracted severe dermatitis. The dye consisted of a preparation of powder and a fixative lotion; the latter contained 10 per cent. of chromic acid instead of the 4 per cent. it should have contained. He did not suggest that the lady had been negligent. The dye was distributed by one firm and manufactured by another. The lotion and the powder were delivered separately to the distributors, and they packed them separately for the trade without applying any test. The percentage of chromic acid was never laid down between the manufacturers and the distributors. The advertisements issued extensively by the distributors declared that "melereon" could not harm the most sensitive skin and did not need any preliminary tests. In a brochure sent to the hairdresser the distributor repeated these claims. It was agreed that a lotion with a 10 per cent. solution of chromic acid is not part of a merchantable hair dye.

The customer sued the hairdresser, the distributors, and the manufacturers. The learned judge decided that he had a valid claim against the hairdresser, even though she did not recommend the dye and applied it carefully and scrupulously in accordance with the distributors' directions. He held that where the agreement is to pay partly for a service and partly for a supply of goods, there is an implied warranty that the goods shall be fit for the purpose for which they are intended. To succeed against the distributors, his Lordship said, the customer had to prove carelessness, the existence of a duty, and breach of that duty. He was satisfied that the distributors had been careless. They were dealing with a manufacturer they hardly knew, a refugee from Spain, and the stipulation for 4 per cent. of chromic acid was only verbal. They never tested the components of the dye in any way. Lastly, they described it as absolutely harmless and needing no test.

In discussing whether they owed a duty to the customer the judge held that the principle he ought to follow was that where a person intentionally excludes interference with the article or its examination by the consumer he brings himself into direct relationship with the consumer and is responsible for the consequences. It does not matter whether he is a manufacturer or a distributor: if he does this he owes the consumer a duty to take care. These distributors had put themselves in the position of being responsible for the customer's safety. Thirdly, although the initial mistake was made by the manufacturers, the negligence of the distributors did the damage, for they both neglected to apply tests and represented that their hair dye, unlike every other, was not dangerous. They knew that the thing they were putting on the market was in a dangerous class of things, and even 4 per cent. of chromic acid was dangerous to a considerable percentage of people. They therefore fell under the principle that a person who puts abroad a dangerous article must be unusually careful. This hair dye was unusually dangerous—like a wolf in sheep's clothing, or a sheep which the distributors had made as dangerous as a wolf. The distributors were therefore also liable to pay damages. The judge did not consider the claim against the manufacturers, because they had gone into liquidation and could not be found.

[1] M'Alister (or Donoghue) *v.* Stevenson, 1932 A.C. 562.
[2] Watson *v.* Buckley and others, 1940 1 All E.R.174.

Universities and Colleges

UNIVERSITY OF OXFORD

Edward George Tandy Liddell, D.M., F.R.S., Fellow of Trinity College, Oxford, has been appointed Waynflete Professor of Physiology from March 1, in succession to the late Professor John Mellanby.

UNIVERSITY OF CAMBRIDGE

The Marmaduke Shield Scholarship in Human Anatomy of the annual value of £100 has been awarded to George John Romanes, of Christ's College.

The M.D. Committee has approved B. S. Jones, M.B., B.Chir., for the degree of Doctor of Medicine, in absence.

Mademoiselle A. M. Goichon of the Catholic Institute of Paris will give three Forlong Fund Lectures in French on the Philosophy of Avicenna, in the Arts School, on March 4, 6, and 7 at 5 p.m.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

The Council announces the award of Kirk Duncanson Fellowships for Medical Research to Dr. Helen M. Russell and Dr. Robert A. Miller for the ensuing year.

The Services

ARMY BLOOD TRANSFUSION SERVICE

On February 14 Queen Mary visited the headquarters in England of the Army Blood Transfusion Service, which is housed in the Southmead Hospital, Bristol. The original experimental work for standardizing the equipment and apparatus and the methods of collecting, storing, preserving, and transporting the blood for this Service was carried out in the Bernhard Baron Laboratories of the Royal College of Surgeons of England, by permission of the President and Council, at the request of Lieut.-General Sir William MacArthur, Director-General A.M.S.

The organization consists of two sections, one in England for the collection, storing, and transport of blood, the other over-seas for distribution and administration of blood when transfusion is indicated. The whole organization is under the general administrative control of Major-General Marrian Perry, Director of Pathology at the War Office. Professor John Beattie, the Director of Research at the Royal College of Surgeons, who carried out the original work of standardization and organization, has been appointed Director of the Service with the rank of Colonel A.M.S. and put in charge of the oversea section. He has also been appointed Director of the Surgical Research Laboratories which have been established in France so that problems can be studied on the spot as they arise, and in order that new discoveries and new methods of treatment can be put at the disposal of medical officers in charge of the sick and wounded at the earliest possible moment.

The home headquarters of the Service is at Bristol, where Dr. L. E. H. Whitby, with the rank of Colonel A.M.S., is in command. He has three experts in blood transfusion working with him, all holding commissions in the R.A.M.C., five medical women, the first ever to be gazetted into the R.A.M.C., an officer of the R.E., N.C.O.s and men, V.A.D.s, and members of the A.T.S. The blood is collected from volunteer donors in the West of England and transported to

France by aeroplane as required. Many people have already given their blood eagerly, but many more are needed.

Queen Mary saw all the various activities of the home headquarters of the Service, the organization of which is without equal in the Army Medical Services of the world. Her Majesty was taken first to see the glass-blowing and mass production of apparatus and its assembling for use in France. The assembling is carried out by V.A.D.s and the glass-blowing by men. The methods of bottling, storing, and transport of blood and the special insulated boxes for use in aeroplanes were then demonstrated. Queen Mary was also shown the method of determining to which group the blood of a donor belonged, and thus ascertaining whether it is of the universal donor type which can be administered with safety to anyone. Her Majesty inspected the personnel and the special transport vehicles, including the refrigerator vans, and also greeted several of the blood donors and expressed her admiration and appreciation of their self-sacrifice. Each donor receives a card of thanks with the quotation from *Henry V*:

> "For he to-day that sheds his blood with me
> Shall be my brother."

Medical Notes in Parliament

A Treasury Minute issued on February 20 announces that the Votes for the War Services of the Ministry of Health and the Department of Health (Scotland) will be presented to Parliament in "token" form for nominal sums of £100 each. It is understood that Estimates for services unconnected with the war will be presented in detail.

A Further Evacuation Scheme

On February 15 Dr. ELLIOT said the Government remained convinced of the desirability of the dispersal of children from the evacuating areas. Plans had been prepared with the object both of retaining in the reception areas as many as possible of the 400,000 children still there and of providing for a further large-scale evacuation to take place if air raids developed on a scale involving serious and continuous bombing.

These plans for a new evacuation applied to school children only—not to adults. It will be for the Government to decide, in the light of prevailing circumstances, when these plans are to be put into operation and in respect of which areas action is to be taken. Evacuation would be voluntary. Parents who registered would be required to sign an undertaking that they would send their children away when evacuation was ordered, and intended to leave them in the reception areas until the school parties returned. Provision of sick bays and of hostels for difficult children and for those who are unsuitable for billeting in private houses and for other purposes would continue. Local authorities were being encouraged to make the best use of houses suitable for these purposes.

Dr. ELLIOT stated in the House of Commons last week in reply to Sir Ernest Graham-Little that the provisions for medical inspection of children before and after they were evacuated were set out in a circular and memorandum just issued to local authorities. The circular to which the Minister referred states that evacuation authorities have been informed that no child should be sent out who is suffering from infection or disease unless arrangements can be made for his care in an institution or other place until he is free from the infection. Children who are found on arrival to be suffering from scabies, impetigo, etc., should not be billeted on householders. To provide for such children hostels for about 5 per cent. of the total number of children expected should be set aside, empty houses being selected in the meantime for this purpose. Evacuation authorities should arrange for suitable helpers to accompany the children and staff these hostels. At the periodic school medical inspection special attention should be paid to children registered for evacuation. Once evacuation is announced the school medical service and nursing staff should concentrate on examining those who are to go. It may be necessary to continue the examinations after the children have reached the reception areas, in which case nursing and medical staff should accompany them and the receiving authorities should make all practicable arrangements for accommodating this staff and completing the examinations. Special attention is drawn in the circular to the need for ascertaining which children are subject to enuresis or other disability which would make them unsuitable for billeting on private householders.

Part-time Service in E.M.S.

Dr. ELLIOT told Sir Ernest Graham-Little on February 15 that consideration had been given to representations made by the Advisory Emergency Medical Service Committee in favour of extending the concession of part-time service in the Emergency Medical Service to the recipients of second-grade salaries on a parity with the terms offered to the higher-grade salaried officers in the same service—that is, with a remuneration of five-eighths of the full salary. The volume of work now falling on officers of the grade referred to was such that he was unable at present to make them the offer suggested.

Influenza

Answering an inquiry by Captain Plugge on February 15, Dr. ELLIOT said the number of cases of influenza was not exactly known, because the disease was not notifiable. The number of deaths ascribed to influenza in the great towns in England and Wales (which included over half the total population) gave some indication of the prevalence of the disease. The numbers of such deaths reported in the period of six weeks ended February 3, 1940, had been successively 46, 94, 158, 291, 416, and 350. These figures were higher than the normal figures for this time of the year, but the age distribution of the deaths was of the normal type, so that the greater numbers of deaths suggested greater prevalence of the disease rather than unusual severity.

A "New" War Gas

Rear-Admiral BEAMISH asked Sir John Anderson on February 15 about the dangers to the civil population of the possible use of a new war gas by the enemy. Sir JOHN ANDERSON assumed this gas to be arseniuretted hydrogen, the properties and limitations of which had long been well known to every competent chemist. He said that the present civilian respirator gave protection against this gas. He did not consider any further measures were necessary.

Cost of Emergency Register

Dr. ELLIOT stated, in reply to Mr. Groves, that the amount paid to the British Medical Association, whether for out-of-pocket expenses or otherwise, over the past two years was £2,112 7s. 8d., made up of £1,204 for the remuneration of clerical staff engaged solely on the maintenance and use of the Emergency Register, £543 10s. for postages, and £364 17s. 8d. for printing and stationery.

Dr. ELLIOT has also stated that it was for the chairman of the Central Medical War Committee to decide when a meeting should be called. The Government bore the expenses claimed by the members in connexion with meetings, amounting to £20 to date, as well as the expenses of maintaining the register. Any remaining expenses had been borne by the British Medical Association.

R.A.M.C. Rank and Professional Status

Mr. Oliver Stanley was asked by Captain CHARLES TAYLOR whether he knew of the anomalous conditions among the officers of the Royal Army Medical Corps, in that certain officers of the Territorial Army Reserve of Officers had been appointed to a military hospital in their own district, with field rank, and continued their private practices in addition to performing their military duties, while other medical men of some years' professional seniority and with higher professional