in determining the result; either the animal was overwhelmed by a streptococcal septicaemia or it remained indifferent to the injection of organisms. This method of approach to the problem, therefore, did not achieve the desired result, but it showed: (1) that antiseptics may abolish virulence in bacteria without actually killing them; and (2) the remarkable stability of virulence of Aronson's streptococcus—a biological phenomenon the reverse of that exhibited by ordinary strains of streptococci.

The next approach to the problem was made along the lines of work recently reported by Gay and his colleagues Without discussing their experiments or conclusions in detail, it might be said that their belief was that macrophages were more important cells in tissue defence than were polymorphonuclear leucocytes. Workers in this country-notably McLeod-had criticized their contentions on the ground that they were testing the resistance to infection not of the body as a whole but of an area of granulation tissue which was able mechanically to exclude invasive organisms. Using Gay's technique extensive macrophage infiltrations were produced in the abdominal walls, omental sacs, and peritoneal cavities of mice. Virulent streptococci isolated from human lesions were injected intraperitoneally into these mice and into an equal number of normal controls. All the controls died in from twenty-four to forty-eight hours with an overwhelming septicaemia. In about half the experimental animals the fatal issue was delayed for from three to five days, but it was never averted. In only two animals did "abscesses" form in the peritoneal cavity. On section these "abscesses" presented appearances which supported McLeod's view that there was merely mechanical obstruction to the invading agent and not an enhanced resistance in any true sense. It was evident that this approach to the problem would not yield the results desired and other methods were investigated.

Mechanism of Infection

One method which was in some ways successful, Dr. Howie continued, and which yielded results of interest, was by the production of areas of "sterile inflammation by calcium chloride. Virulent streptococci isolated from human lesions were injected into the peritoneum in mice with "calcium chloride inflammation" of their abdominal walls. Eighteen normal controls were also injected. All the controls died in from twenty-four to forty-eight hours; six of the experimental animals survived, and the rest died at times varying from two to sixteen days after injection. The mechanism of infection was studied. Streptococci rapidly entered the blood from the peritoneal cavity. In twenty-four hours they had localized in large numbers at the site of "calcium chloride inflammation." Here they produced well-marked abscesses and areas of cellulitis almost identical with those found in human infection. Reinfection of the blood stream occurred before death, presumably from these The lesions produced were, on an average, about 20 by 15 mm., compared with lesions of about 5 by 3 mm. produced by streptococci alone. These areas thus behaved as "fixation abscesses," and apparently saved the lives of one-third of the animals injected, besides delaying the progress of infection in the others.

Conclusions and Clinical Applications

From these experiments, Dr. Howie said that three conclusions might be drawn: (1) organisms in the blood might localize in areas of reacting tissue; (2) this occurrence might favour the host's chance of survival, as in the experiments quoted; or (3) on the other hand, it might determine a severe and even fatal infection. It was, of course, dangerous and controversial to apply these experimental conclusions to clinical practice, but two questions seemed to arise. First, why would surgeons in this country not investigate the fixation abscess as a therapeutic measure in pyogenic infections not responding

to other forms of treatment? There was need for such investigation. Many French authors wrote favourably of the method, but more exact data were required than were given in the literature. Secondly, it was now known that bacteriaemia was commoner than was formerly believed. Therefore, was it not probable in many of the Cl. welchii infections following operation, or even subcutaneous injection, that it was the patient who infected himself? The nurse or the catgut was usually blamed. But these experiments showing how organisms localized in areas of tissue reaction suggested that a similar mechanism might operate in human cases.

Local News

ENGLAND AND WALES

Croydon Epidemic of Typhoid

In the introduction to his annual report for 1937 as medical officer of health for the county borough of Croydon, Dr. Oscar M. Holden makes the following reference to the local epidemic of enteric fever:

"The health record of the year was unfortunately marred by an outbreak of typhoid fever in parts of Croydon supplied by the high-level water supply. A full report on the outbreak will be made at a later date. This outbreak, though not so excessive as an outbreak in another southern town in 1936, obtained very great publicity. Upon representations made by a group of citizens, who formed the South Croydon Typhoid Outbreak Committee, the Minister of Health decided to hold a public inquiry into the causes giving rise to, and the steps taken to combat, the outbreak. This inquiry is the first of its kind to be held. It opened on December 6, when an adjournment was made until December 21, from which date it continued until January 12, 1938. The holding of so comprehensive an inquiry, for which much detailed information had to be compiled, and at which many criticisms had to be met and combated, during the actual course of a serious outbreak of epidemic disease, placed heavy additional burdens upon the department, already working at high pressure to deal with the outbreak. It says much for the energy and loyalty of the staff of the department that both burdens were shouldered successfully. The findings of the Commissioner are now too well known to need any reiteration, but it is justifiable to inquire, first, if the inquiry could have been held just as usefully after the outbreak had been dealt with; and, secondly, if the findings could not have been arrived at as efficiently and more expeditiously by methods of a less elaborate and costly nature. If this procedure is to form a precedent, then medical officers of health will in future, when called upon to tackle an outbreak of epidemic disease, also have to take steps to protect themselves at the public inquiry held thereinto.

Child Guidance Conference

A preliminary programme has now been issued for the fourth Biennial Child Guidance Interclinic Conference to be held on Friday, January 27, and Saturday, January 28, 1939, at British Medical Association House, Tavistock Square, London, W.C. This conference is for representatives and professional members of staffs of child guidance clinics in Great Britain. On January 27, at 10 a.m., the president, Lord Blanesburgh, will give an opening address in the Great Hall, followed by a session on "Treatment of Parents." In the afternoon there will be a public meeting on "Juvenile Delinquency" under the chairmanship of Lord Alness; members of the public may be admitted to this by ticket, price 2s. 6d. The conference dinner will take place at the Café Royal that evening. On January 28 there will be three concurrent morning sessions: one for psychiatrists in the Council Chamber to discuss personality deviations and the diagnosis of psychoses, one for administrative representatives in the Hastings Hall to discuss the findings of the Feversham

Report on the voluntary mental health services, and one for psychologists in Committee Room A to discuss the scope of the educational psychologist working in the schools. The afternoon session in the Great Hall will be devoted to a discussion on "Substitute Homes." Inquiries about the conference should be addressed to the Child Guidance Council, Woburn House, Upper Woburn Place, W.C.1.

Kettle Memorial Lecture

In May, 1937, an appeal was issued to friends and admirers of the late Professor E. H. Kettle, M.D., F.R.S., for subscriptions towards a memorial fund. More than £730 was received; this has been invested and a trust fund set up, with Professor J. H. Dible, Dr. W. E. Gye, Professor G. Hadfield, Professor W. D. Newcomb, and Colonel A. H. Proctor as trustees. It was decided that the best way of commemorating Professor Kettle would be by an annual lecture to be delivered in rotation in the medical schools with which he had been associatednamely, the British Postgraduate Medical School, St. Bartholomew's Hospital Medical College, the Welsh National School of Medicine, and St. Mary's Hospital Medical School. It was further decided that the choice of lecturers and arrangements for the lecture in any year should be made by the school at which the lecture would be delivered. The inaugural lecture will be given on Thursday, November 24, at 5 p.m., by Professor W. W. C. Topley, M.D., F.R.S., in the large theatre of the London School of Hygiene and Tropical Medicine, Keppel Street, W.C., by courtesy of the Board of Management. It is entitled "The Place of Pathology among the Medical Sciences," and the chair will be taken by Sir John Caulcutt, K.C.M.G., chairman of the Governing Body of the British Postgraduate Medical School.

Correspondence

Estimation of Blood Vitamin B₁

SIR,—I have read the paper by Drs. Eirwyn N. Rowlands and John F. Wilkinson in the *Journal* of October 29 (p. 878) with interest because I have just submitted for publication a paper in which I conclude that Meiklejohn's modification of Schopfer's method does not give a quantitative estimate of the vitamin B₁ in blood.

Rowlands and Wilkinson state that they have established the fact that the test gives a fairly reliable method of estimating the vitamin B, in blood. They say: "The only factor other than vitamin B₁ that has been shown to affect the mould growth is the concentration of nitrogen in the medium; allowance can be made for this." I should be interested to know how this allowance can be made when blood is present, because I have had difficulty in eliminating the adjuvant action of sources of nitrogen in blood. In addition, the first part of this statement is open to criticism. First, substances other than vitamin B₁ and its disintegration products are known to act as growth factors for the fungus. Secondly, a host of substances are known to affect its growth; for instance, if the authors will add a pinch of chalk to their modified Schopfer's medium (which is in many respects a poor medium) they will obtain, I suspect, an increase of perhaps 50 per cent. in the growth produced by either 0.1 μ g, or excess vitamin B₁. They state (perhaps following Meiklejohn) that addition of small amounts of vitamin B, to blood usually increases the growth by the expected amount. I should be interested to know how often this result has been obtained, because I found that in 150 1-ml. samples of blood from different cases addition of 0.1 µg. of vitamin B₁ produced an increase of 50 per cent, or more over the expected amount in 63 per cent. of cases; in fifty experiments addition of excess vitamin B₁ to 1 ml. of blood invariably produced a greater growth than in the control with excess vitamin B_1 alone (the average increase being 78 per cent.). They also state (perhaps again following Meiklejohn) that samples of 1, 2, and 3 ml. of blood give values in the ratio 1:2:3. I have tested this upon 235 different samples of human blood and find that in 155 the 3 ml. value (expressed in μ g. per 100 ml. blood) has been one or more μ g. higher than the 1 ml. value; in twenty-two samples the growth with 3 ml. of blood was greater than that given by excess vitamin.

My own doubts about the reliability of the test have been expressed only verbally in the presence of both authors; they are no doubt justified in disregarding them. But there can be no justification for ignoring statements of other authors that are not in agreement with them. Williams, who first suggested the use of a micro-organism for the assay of vitamin B, has stated in connexion with *Phycomyces* that "the use of fungi in quantitative testing for vitamin B₁ in extracts appears hazardous in the extreme." Van Veen in a Dutch journal concluded that in testing impure extracts (including blood) by Schopfer's method "the results were far from reliable; in fact, that they were at times entirely unserviceable." Schopfer himself has stated that the best way to use the method is first to isolate the vitamin by adsorption on fullers' earth. These statements demand attention.

With great diffidence I communicated last June (see Quart. J. Med., October, 1938, 7, 591) the results of estimations by a slightly modified method of the apparent vitamin B₁ in only 200 different cases. I found significantly low values in cases of "alcoholic" (three cases), gastrogenous, and nutritional polyneuritis; in some cases of idiopathic hypochromic anaemia; and in scurvy. I found normal values in pernicious anaemia with or without subacute combined degeneration of the cord. My results were not published in print because I had then done determinations on only twenty-six normal controls; these gave a mean of 11.5 µg. per 100 ml., and a statistical analysis showed that there is one chance in 100 of an observation falling below 7.7 or above 15.2. Although the authors have reached the same conclusion about different diseases from their total of forty-eight cases, it is not justified by the results they publish. On the basis of only eight normal controls they consider the normal range to be 6.5 to 16.5 µg. per 100 ml.; a statistical analysis of their data will show that there is one chance in twenty that a determination will fall below 0.94 or above 16.5. Not a single one of their determinations is significantly low when judged by these standards, and yet they regard 5.5 μ g. per 100 ml. as "gross deficiency." This figure, 5.5, is scarcely different from their lowest normal, 6.5, since "the error of the test is apparently less than 10 per cent." Further, in Fig. 3 they show two "specimen normal curves" in which the blood figures, after the injection of vitamin B₁, rise before falling rapidly "to normal levels" within an hour; in one of these two normal curves the level starts at a little over 5µg, per 100 ml. (about 5.2) and is back at the same figure in two hours. Surely a mistake has crept in, because if 5.5 is "gross deficiency," why is 5.2 regarded as a "normal level"?

There are other points that I should like to raise, but I have already taken up too much of your valuable space. I do wish to emphasize, however, that the results Drs. Rowlands and Wilkinson publish are statistically worthless.—I am, etc.,

Oxford, Oct. 29.

H. M. SINCLAIR.

Medical Research in England

SIR,—The Harveian Oration prompts me to make a few comments on the difficulties and necessity of maintaining research work in the teaching hospitals.

After spending some seven months in German hospitals and university clinics I came away, like most English visitors, impressed by the intensity of their tradition of investigation. Good work is continually being turned out by young men of no outstanding abilities, and this all in the day's routine. Sir Edward Mellanby has touched on the organization that makes this possible. Our own teaching hospitals have no such strong tradition

1065

SIR.—I entirely agree with Mr. A. G. Dickens's letter in the Journal of November 5 (p. 965). I have advocated bomb-proof shelters from the first as the only basis for A.R.P., and I would like to urge the leaders of our profession to bring pressure on the Government to put through a scheme without delay and regardless of legitimate expense in London and other big towns. Medical men cannot possibly give adequate attention to casualties unless really safe bomb-proof shelters are provided for them and their patients. If sufficient accommodation is forthcoming for all those who are not likely to be evacuated the majority of casualties will be prevented and the threat of bombing will lose much of its terrors. Mr. Dickens has asked those who are interested to write to him at Keble College, Oxford, and I hope there will be a big response.-I am, etc.,

London, W.14, Nov. 7.

C. WATNEY ROE.

Universities and Colleges

UNIVERSITY OF OXFORD

On November 7 Jean Orr-Ewing, B.M., was elected to an official Fellowship at Lady Margaret Hall.

UNIVERSITY OF CAMBRIDGE

On the nomination of the Faculty Board of Medicine Dr. A. N. Drury, F.R.S., Huddersfield lecturer in special pathology, has been appointed assessor to the Regius Professor of Physic for the year 1939.

UNIVERSITY OF LONDON

Sir Girling Ball, F.R.C.S., has been elected Dean of the Faculty of Medicine for the period 1938-40.

Sir Ernest Graham-Little, M.P., has been re-elected for the seventeenth consecutive year chairman of the Council for External Students of the University of London.

University College

A special University Lecture on "Intermolecular Forces and Infra-red Spectroscopy" will be given at University College, Gower Street, W.C., by Dr. Jacques Errera, professor of physical chemistry in the Université Libre de Bruxelles, on Monday, November 28, at 5.30 p.m. The chair will be taken by Sir Robert Robertson, F.R.S. The lecture, which will be delivered in English and illustrated with lantern slides, is addressed to students of the University and to others interested in the subject. Admission is free without ticket.

ROYAL COLLEGE OF SURGEONS OF ENGLAND THE BUCKSTON BROWNE DINNER

The eleventh annual Buckston Browne dinner to Fellows and Members of the Royal College of Surgeons was held at the College on November 10, with the President, Mr. Hugh Lett, in the chair. Reviewing the activities of the College during the past year the President said the chief event had been the opening of the Bernhard Baron Research Laboratories. Experimental research had become an increasingly important part of the activities of the College during the last ten years. six years ago it received a great stimulus by the magnificent gift and endowment by Sir Buckston Browne of the Research Farm at Downe, but the laboratories at the Royal College were unworthy of that great institution. Although the College did not know where the money might come from they hope fully drew up plans and prepared estimates of cost. Their hope was justified, for Sir Alfred Webb-Johnson conjured the splendid gift of £30,000 from the Bernhard Baron Trustees. Building was begun in January, 1937; the fourth and fifth floors were reconstructed, and a sixth floor added, and the new laboratories were opened by the Earl of Athlone last December. The excellence of the work that had been done at the Buckston Browne Farm and during the last eleven months in these laboratories must give much satisfaction to the generous donors. Most of the research had a direct bearing on surgical treatment, diagnosis, or pathology

The College was grateful, Mr. Lett continued, for grants for its research workers from outside bodies, particularly the Medical Research Council, the Rockefeller Institute, and the British Medical Association. These grants were a source of

much satisfaction, not only as a recognition and appreciation of the quality of the work that had been done and the facilities the College could offer, but as a tribute to the Director of Research and Professor of Experimental Surgery, Dr. John Beattie, who, well known for his original work in the field of physiology, was now recognized for his gifts in initiating and directing research. Good progress had been made in the Museum under the direction of the Pathological Curator, Dr. L. W. Proger, and the Assistant Conservator, Dr. A. J. E. Cave. Many valuable specimens had been added, particularly in the sections of esteology and pathology. The particularly in the sections of osteology and pathology. The pathological work of the Radium Beam Therapy Research had been entrusted to the College, and the secretariat of the Imperial Cancer Research Fund had been transferred there. Mr. Lett acknowledged the College's gratitude to Mr. Braithwaite for securing the bust of Thomas Wormald, who was President in 1865, and to the Middlesex Hospital Medical School for the gift of a fine bust of John Whitaker Hulke, President from 1893 to 1894. In conclusion he peferred to the need for cleaning and restoring the College's pictures. The recent alterations to the building and the increasing cost of the Museum and Research Departments had made it impossible to draw on general funds for the purpose, but Sir Alfred Webb-Johnson had put the College still further in his debt by announcing a gift of five hundred guineas from an anonymous donor.

Sir Buckston Browne, replying to the toast of his health, said that it had been his privilege to live through exactly the last half of the nineteenth century, that wonderful century which had done more for the alleviation of man's physical miseries than all previous centuries put together. With this achievement the names of Jenner, Pasteur, and Lister were immortally associated; they were the emancipators of the human body. But above them all was the great figure of Charles Darwin, the emancipator of the human mind. Darwin the property where he completes the property of the human mind. taught man where he came from, what he was, and what he might reasonably expect to be if he studied the great truths of Nature and the laws of her operations. The call of Darwinism was to the unity of all mankind in a struggle to conquer the evils which menaced its existence and destroyed its happiness—disease and war. As the dinner was a special occasion, a father-in-law entertained by his son-in-law, Sir Buckston asked each guest to accept a silver snuff box, and assured them that a daily pinch of snuff reduced the risks of a cold in the head and other respiratory troubles to their minimum.

The following Fellows and Members were present:

Council.—Professor G. Grey Turner and Professor R. E. Kelly (vice-presidents), Mr. Ernest W. Hey Groves, Sir Cuthbert Wallace, Mr. W. Sampson Handley, Mr. Wilfred Trotter, Professor A. H. Burgess, Mr. Victor Bonney, Professor Graham Simpson, Sir James Walton, Sir Alfred Webb-Johnson, Mr. G. Gordon-Taylor, Sir Charles Gordon-Watson, Mr. R. C. Elnslie, Mr. L. R. Braithwaite, Mr. H. S. Souttar, Sir Girling Ball, Mr. Seymour Barling, Mr. C. Max Page, Mr. W. H. Ogilvie, Mr. Cecil P. G. Wakeley, and Mr. L. E. C. Norbury.

MIT. L. E. C. Norbury.

Fellows.—Dr. Tom Bates, Mr. Lancelot Bromley, Mr. W. Derrick Coltart, Mr. D. R. Davies, Mr. John Foster, Mr. R. H. Franklin, Sir Francis Fremantle, Mr. R. Affleck Greeves, Mr. H. E. Harris, Mr. Kenneth James, Mr. Geoffrey Jefferson, Mr. R. Scott Mason, Mr. T. W. Mimpriss, Mr. Erichsen S. Page, Professor C. A. Pannett, Mr. Bertram A. Pidcock, Mr. A. McKie Reid, Mr. J. E. H. Roberts, Mr. A. E. Roche, Sir Leonard Rogers, Mr. F. F. Rundle, Mr. A. Simpson-Smith, Mr. A. S. Till, Mr. A. Glandon Williams, and Mr. C. P. Wilson.

Members.—Dr. Heward Reil, Dr. D. E. Bedferd, Scale St.

A. Simpsont-simit, Mr. A. S. Ini, Mr. A. Glandon Williams, and Mr. C. P. Wilson.

Members.—Dr. Heward Bell, Dr. D. E. Bedford, Surgeon Rear-Admiral C. M. Beadnell, Dr. H. E. Blake, Dr. H. E. A. Boldero, Dr. C. P. F. Boulden, Dr. E. L. Bunting, Dr. Judson S. Bury, Dr. Frank Clayton, Mr. T. V. L. Crichlow, Mr. F. N. Doubleday, Dr. F. R. Eddison, Mr. B. J. Frankenberg, Dr. Beaufort Fraser, Dr. S. E. Furber, Dr. T. H. Gardner, Mr. W. Cliff Hodges, Mr. L. D. A. Hussey, Dr. R. C. Jewesbury, Mr. C. E. M. Jones, Dr. W. E. Joseph, Mr. F. G. Layton, Commander Murray Levick, Mr. Windsor Lewis, Mr. A. F. Morcom, Dr. W. D. Newcombe, Mr. E. E. Pochin, Dr. A. F. Potter, Dr. L. W. Proger, Mr. W. Bentley Purchase, Mr. Walton R. Read, Dr. G. R. Rossdale, Dr. Gordon Simpson, Dr. A. W. Stott, Mr. T. Y. Simpson, Mr. W. J. Susman, Dr. J. W. de Witt Gray Thornton, Mr. T. H. E. Taylor-Jones, Dr. P. H. Whitaker, Mr. Cecil Wilson, Sir Charles Wilson, Mr. H. B. Wilson, Dr. J. A. Young, Dr. A. H. Zair.

Also present were Professor R. J. S. McDowall, Professor John Beattie (Director of Research), Mr. Kennedy Cassels (Secretary), Dr. A. J. E. Cave (Assistant Conservator), and Mr. W. F. Davis (Assistant Secretary).

(Assistant Secretary).

An ordinary council meeting of the Royal College of Surgeons of England was held on November 10, with the President, Mr. Hugh Lett, in the chair.

The following were appointed assessors for the Primary Fellowship examinations to be held over-seas in 1939: at Lahore, January 2: Anatomy, Lieutenant-Colonel F. J. Anderson, M.C., F.R.C.S., I.M.S., professor of surgery in the University of Calcutta; Physiology, Lieutenant-Colonel H. S. Anand, M.B., Ch.B.Ed., D.P.H., I.M.S. At Cairo, January 13: Anatomy, Professor D. E. Derry, M.B., Ch.B. Physiology, Professor Gleb von Anrep, M.D., D.Sc., F.R.C.S.

Dr. A. J. E. Cave was appointed representative of the College on the British National Human, Heredity, Council

College on the British National Human Heredity Council, and Mr. C. Max Page on the Fracture Subcommittee of the

Voluntary Hospitals Committee for London.

Miss Collard and Dr. H. N. Goadby were appointed Mackenzie Mackinnon Research workers and Mr. G. M. Hill was reappointed for the third year.

Diplomas

Diplomas of Membership and Diplomas in Public Health were granted to the candidates whose names were published in the report of the meeting of the Royal College of Physicians of London in the *Journal* of November 12 (p. 1023).

The following hospitals were recognized under paragraphs

21 and 23 of the Fellowship regulations:

London Homoeopathic Hospital, house-surgeon. Cornelia and East Dorset Hospital, Poole, recognition extended to July 31, 1941.

The Services

No. 14 STATIONARY HOSPITAL DINNER

The nineteenth annual dinner of the medical officers of No. 14 Stationary Hospital will be held on Thursday, December 8, at the Trocadero Restaurant, Piccadilly, W., at 7.15 for 7.45 p.m., with Colonel C. R. Evans, D.S.O., in the chair. The price of the dinner is 12s. 6d exclusive of wines. The honorary secretaries are Major-General H. M. Perry and Dr. H. L. Tidy, 39, Devonshire Place, W.1.

Medical Notes in Parliament

The House of Commons this week completed the debate on the Address in reply to the King's Speech and also discussed motions proposed by private members.

New Bills

The Housing (Financial Provisions) (Scotland) Bill was presented on November 9 by Mr. Colville. The same Minister presented on November 10 the Reorganization of Offices (Scotland) Bill. This latter Bill gives effect to the Report presented in 1937 of the Committee on Scottish Administration. The Bill will vest in the Secretary of State for Scotland the functions of the Department of Health for Scotland. One clause provides for the reorganization of the General Board of Control for Scotland.

The Criminal Justice Bill was introduced by Sir Samuel Hoare on November 10. Two of its objects are "to provide new methods and to reform existing methods of dealing with offenders and persons liable to punishment" and "to amend the law relating to the management of prisons and other institutions."

Private Members' Bills were presented in the House of Commons on November 11 by members successful in the ballot. Dates chosen for second reading, titles of Bills, and members introducing are:

November 18, Workmen's Compensation Bill, Mr. Ridley. November 25, Public Health (Coal Mine Refuse) Bill, Mr. Lawson.

December 9, Workmen's Compensation Acts (1925 to 1934) Amendment Bill (to amend the Workmen's Compensation Acts with respect to miners' nystagmus; to provide for the establishment of medical tribunals of appeal; to make sundry alterations in medical procedure, etc.), Miss Ward.

December 16, Adoption of Children (Regulation) Bill, Miss Horsbrugh.

December 16, Contraceptives (Regulation) Bill (to regulate the public display of contraceptives, etc.), Mr. Simmonds, supported by Sir Francis Fremantle, Sir Joseph Leech, Sir Henry Morris-Jones, Major Neven-Spence, and Dr. Salter.

February 3, Charitable Collections (Regulations) Bill, Mr. Craven-Ellis.

February 3, Voluntary Hospitals (Relief from Rating) Bill, Mr. H. G. Williams.

The text of the Workmen's Compensation Bill, introduced by Mr. Ridley, was issued on November 15. It includes a provision to substitute for medical referees under the Workmen's Compensation Act a medical board appointed in accordance with regulations to be made by the Home Secretary.

Debate on the Address

The debate on the Address in the House of Commons was continued on November 14 on a Labour amendment. Moving this, Mr. PETHICK-LAWRENCE said that the Labour Party welcomed the announcement of the new cancer campaign, but thought that a still more urgent need was to take drastic steps to cure the cancer in the body politic of the State itself. There was an artificial shortage, exclusive of supplies from abroad, a limitation of home output, and, in some cases, a deliberate destruction of food. He paid a tribute to the scientific men who had brought the question of malnutrition to the front. They had done valuable service to mankind, and had made a lasting contribution to the progress of the world. Dr. M GONIGLE, the medical officer of health for Stockton-on-Tees, who had been engaged on a study of the health of children of the better-off classes compared with that of city children, had said that the latter were five times as great sufferers from anaemia as the children of the professional classes. In the case of bronchial troubles, city children were ten times more liable to disease than children of the professional classes. He had been amazed at the statistics of Sir John Orr with regard to stunted growth. He had shown that if one compared the average height of a large sample of boys taken from the public schools with a similar large sample of boys from the elementary schools there was a difference of no less than six inches between the one and the other. Mortality figures for this country, given in a book published by the League of Nations, showed that the prosperous districts had a corrected death rate 30 per cent. below the average, whereas the poorer districts showed a figure 40 per cent. higher than the average. He did not think that anyone denied that malnutrition was largely responsible for these differences. The Prime Minister, last week, had referred to nutrition, and used words which, if they meant anything, surely meant that one of the main causes of malnutrition was not lack of purchasing power but ignorance and possibly negligence on the part of the mothers in the spending of their money. That was a very comfortable doctrine, but the statements of medical officers did not substantiate it. As he (Mr. Pethick-Lawrence) understood it, the position of the Government in regard to the condition of the people was that it was a question of expenses, and that at the present time when money had to be expended on rearmament there was necessarily a conflict between guns and butter.

THE CANCER CAMPAIGN

Dr. Elliot said that the Government proposed shortly to introduce a Bill which would make provision for extended arrangements for the treatment of cancer. They anticipated that modern methods of diagnosis and treatment, either by x rays or by operation, would thus be made available to all who suffered from or-and this was an even larger groupwho feared this disease. At present only about one-quarter of the cases which might benefit by treatment were receiving treatment on modern lines. Assurances had been received recently that the great research organizations not only would continue their efforts to acquire as much knowledge as possible as to the cause of the disease but would increase them. How to get the early cases to attend the centres was one of the difficulties those administering the schemes would have to face, but, as public opinion had been altered in its attitude towards tuberculosis by national and local schemes, he hoped that people would be persuaded to take advantage of this new scheme, because an early cure would often lead to a complete cure.