

may possibly have overlooked some useful action. It has been a common practice in extensive surveys to test extracts only against *Staph. aureus* and *Bact. coli*; it is conceivable, if unlikely, that an extract of some innocent plant to which these bacteria are quite indifferent might have a powerful action on tubercle bacilli or viruses. Moreover, activity may be confined to a particular part of the plant, or vary with the stage of its growth. Nevertheless the fact remains that the only true chemotherapeutic agents which have so far been obtained from higher plants are alkaloids, and their discovery antedates the present efforts by generations. In this connexion it is odd that this book should list *Dichroa febrifuga*, the alkaloid from which, dichroine, is described as effective in malaria, yet mention neither quinine nor emetine. Are these antibiotics, or are they not? The definition of the term given in the preface is "a substance derivable from living organisms and capable of adversely modifying the vital functions of specific micro-organisms." According to this, the human body itself is quite a considerable source of antibiotics: that lysozyme should so be regarded is reasonable, but a definition which plainly includes gastric acid and serum antibodies is questionable. Surely a distinction should be made in the plant kingdom between substances "capable of" adversely affecting micro-organisms and those which actually do so in nature. The products of certain bacteria and fungi undoubtedly antagonize the growth of other species with benefit to those forming them. Possibly essential oils and other substances formed by plants enable them to resist attack by bacteria and moulds, and to this extent they qualify for the description. Otherwise the use of the term seems to call for some restriction. It is logical to regard antibiosis as the opposite of symbiosis, and this implies a naturally observed relationship.

We should nevertheless be grateful to Karel and Roach for having adopted a wider definition, since the result is a work of reference full of interest and invaluable to the microbiologist. The items in it, which number roughly 15,000, include not only antibiotics themselves and species forming them but species and diseases susceptible to them. As between these different categories there is an admirable system of cross-references, and the bibliography, which gives titles, occupies 55 pages. The information given about the more important antibiotics is extensive, although compressed into little space. The book will be particularly useful to anyone who thinks he may have made a discovery in this field: it is easily possible to verify in a few minutes that a substance formed by a certain organism and acting on certain others has already been described, and the references are there to enable the inquirer to get details. This is

not so rare or unimportant a use as it may seem, for what bacteriologist does not from time to time find a mixed culture in which something exciting seems to be happening?

### BEVAN VERSUS SPENS

It was recently observed that the late Government accepted the Spens recommendations for the remuneration of general practitioners and consultants and specialists in a fit of absentmindedness. Now in a written reply to Mr. Tom Reid, M.P., Labour Member for Swindon, Mr. Aneurin Bevan is preparing, so it would seem, to put the Spens reports into the discard, to use a phrase of one of his predecessors. This is what he is reported to have written to Mr. Reid<sup>1</sup>: "On the basis of this report an immediate increase in capitation was provided and I negotiated with the B.M.A. the conditions under which the doctors eventually entered the National Health Service." The medical profession entered the National Health Service in 1948 on the clear understanding that the terms of service could be immediately discussed. At the A.R.M. in Harrogate in 1949 the Chairman of Council, Dr. H. Guy Dain,<sup>2</sup> said: "At the end of a year we find that the Government is not even yet prepared to agree the terms of service of consultants and specialists in our hospitals, and the final remuneration of general practitioners is not yet determined. . . . We assumed on the statements given to us before we accepted the Service that our entry into the Service was conditional on the establishment of a Whitley machinery by which our terms could always be discussed and which would be backed by arbitration in the event of disagreement. Under no other conditions could we have accepted service."

In his statement last week Mr. Bevan went on to say this: "It is true to say that the B.M.A. always contended that I had not fully implemented the Spens report. I, however, took the opposite view, and, with the establishment of the National Health Service and the entry of the doctors into it, I said that, in my opinion, the Spens report was finished with." This is a most ominous statement and so far we have been unable to find any record that would support Mr. Bevan's assertion. If the Labour Government were to return to power it is not impossible that a future Minister of Health will seize upon this statement in an obscure newspaper as evidence of the policy laid down by a former Labour Minister of Health. It is therefore essential that Mr. Bevan should give the profession an exact reference to his alleged statement that "the Spens report was finished with." That his successor, Mr. Marquand, did not share his view is clear from the terms of reference of the Adjudicator he agreed with the B.M.A.: "To determine the size of the Central Pool . . . in order to give effect to the recommendations of the Spens Committee." It was on the strength of the recommendations of the Spens report that the medical profession with much reluctance and hesitation agreed

<sup>1</sup> *Evening Advertiser*, June 2, 1952.

<sup>2</sup> *Supplement to British Medical Journal*, 1949, 2, 2.

to enter the National Health Service. If any Government were to try to shift its ground—except in full agreement with the profession—then a situation would arise in which there would be no alternative except withdrawal from service.

### THE DANGER OF AMIDOPYRINE

Agranulocytosis is one of the most serious manifestations of drug idiosyncrasy. Dunlop and Rolland<sup>1</sup> encountered this complication in 2% of a series of 200 cases of thyrotoxicosis treated with thiouracil or methyl thiouracil. The long list of drugs which may induce acute granulocytopenia now includes troxidone, chloramphenicol, and "diparcol." The use of any of these drugs is a calculated risk, justifiable only if the drug has a clear therapeutic advantage over more innocuous substitutes. Most physicians would think it wrong to withhold the benefits of troxidone from a child suffering from incapacitating *petit mal* simply because there was a 1 in 100 chance that the patient might develop agranulocytosis, but they would not feel constrained to prescribe for a patient with headache a potentially lethal drug when a wide range of safer analgesics was at their disposal. Amidopyrine became notorious as a cause of agranulocytosis as long ago as 1922, yet cases of agranulocytosis associated with the administration of this drug continue to be reported. Amidopyrine was included in Schedule IV of the Pharmacy and Poisons Act, 1933, and has since been obtainable in this country only on a doctor's prescription. Dr. George Discombe, in a paper appearing elsewhere in this issue, has performed a valuable service by drawing attention to the proprietary preparations containing amidopyrine (combined with a barbiturate) which are sometimes prescribed by practitioners unaware of their composition. Discombe suggests amendments to the existing regulations governing the prescribing and dispensing of amidopyrine which would at least ensure that doctors did not give the drug unwittingly.

Drs. F. Dudley Hart, D. G. Wraith, and E. J. B. Mansell, whose report of a patient with agranulocytosis who recovered after treatment with A.C.T.H. is also published this week, add an important rider to Dr. Discombe's paper: they point out that though amidopyrine itself is not available to the general public, the compound formed by sulphonation of amidopyrine, and sold under the proprietary name "novalgin," is not subject to the provisions of Schedule IV. These authors adduce much circumstantial evidence to incriminate novalgin as the cause of agranulocytosis in the case they describe. Their argument is not impregnable—the patient may have been taking other drugs simultaneously, and the leucocytes in her blood did not fall as quickly as might have been expected when a test dose of this drug was given after full recovery from the acute illness had taken place—but the case against the drug is a strong one.

Even if the goal of preventing amidopyrine-induced agranulocytosis can be reached, the problem of treating the established condition will remain as part of the price to be paid for the potency of modern therapeutic

agents. Of the innumerable remedies advocated, only penicillin has stood the tests of time and critical clinical observation. It now appears that A.C.T.H. should bring about a further improvement in the prognosis of acute agranulocytosis due to drug idiosyncrasy. Hart and his colleagues are careful to give a warning that not all cases may respond as remarkably as did the patient under their care, who, in spite of energetic treatment along conventional lines, was *in extremis* when the administration of A.C.T.H. was started. This result, and one at least of the two similar cases reported from North America which Hart and his colleagues quote, fully justify their conclusion that A.C.T.H. (or cortisone) should, at least over a trial period, form a routine addition to the standard treatment of drug-induced agranulocytosis.

### INFANTS OF DOUBTFUL SEX

The development of the foetus proceeds to quite an advanced state before any obvious differentiation into male or female occurs. It is thus hardly surprising that in a certain number of cases—few, but not so few as is commonly supposed—this differentiation is incomplete and problems of extreme complexity in consequence arise. The advice given for the solution of these problems may make the difference between long years of suffering for parents and child and a life that is often surprisingly happy and contented. It is of first importance that those who have not the necessary knowledge of a most abstruse and complicated subject should refrain from giving early and confident opinions on a case of doubtful sex: ill-considered pronouncements have in the past caused lasting damage. Consultants who work in this field have a lively consciousness of the limits of our present knowledge, and in trying to decide on the most suitable course to be followed they find themselves handicapped, as Mr. D. I. Williams points out in an article at p. 1264, by the lack of a generally accepted classification and nomenclature. He suggests a scheme which has undoubted advantages, not least in doing away with clumsy and vague terms. The description, for instance, of a "female intersex" suggests a definite condition, which is more than can be said for a "female pseudo-hermaphrodite."

In the assessment of the condition and of the prospects for the patient certain apparatus is necessary, together with skill and experience in its use. Urethroscopy is essential in almost all cases, but the number of suitable instruments in existence must be very small. It will be seen that Mr. Williams agrees with the traditional teaching that where real doubt exists the child is better brought up as a boy. A well-known Scottish paediatrician used to add weight to this advice by pointing out the advantage given by masculinity in rewards for equivalent work; but even in the not unlikely event of this reason becoming invalid, it is far less embarrassing for a male not to need to shave than for a female to develop a beard.

The literature of the subject is large and provides a fascinating study in normal and abnormal human nature. It tells of many tragedies and also many comedies of the kind inseparable from a condition whose mere exist-

<sup>1</sup> *Proc. roy. Soc. Med.*, 1950, **43**, 937.

ence violates many cherished conventions and taboos. It also describes a surprising number of happy marriages in which a partner is of indeterminate or wrong sex: it is a curious point that many such people have particularly cheerful and courageous natures. Among complications in later life there has already been dispute over the validity of a female Olympic record put up by an individual who subsequently "changed sex"; and a judge has recently given the sensible ruling that a similar reversal of status does not invalidate a legacy, the person remaining the same no matter whether regarded as a daughter or a son. It is conceivable that a similar question might arise over the inheritance of a sex-linked title or position, with consequences difficult to foresee.

### FOR THOSE THAT HAVE EYES

Some learn best from lectures, some from the printed word, others from pictures, and each mode of understanding brings its own kind of knowledge. The heyday of the spoken word was the Socratic discourse and the mediaeval disputation, the study of rhetoric as a university subject; while the coming of printing meant a change from philosophical speculation and argument to the massing of factual knowledge in encyclopaedia and scientific journal. Now, with photography, the cinema, and television, we are entering the Visual Age. The new social and mental outlooks this implies cannot yet be recognized—it is work for the future historian—but even in the microcosm of medicine the effects are noticeable. Radiography, which is only a specialized form of photography, some time ago revolutionized diagnosis. Sheldon's somatotyping and the study of physique are only possible with the aid of a recording camera, and have produced a new interest in constitutional differences. The many new kinds of microscopes of the last 15 years—phase-contrast, electron, reflecting, x-ray, and flying-spot—are already enormously widening the range of scientific observation. Perhaps television, which has already been used to transmit x-ray photographs and surgical operations, will revolutionize teaching and consultant practice.

New techniques breed new technicians, and *Medical and Biological Illustration*<sup>1</sup> was founded in part to enable medical photographers and medical artists to discuss with one another the potentialities of their craft. It is good to see that it contains much more than reports on the minutiae of technique. The latest issue, for instance, contains an article<sup>2</sup> on the place of photography in university education, advocating its introduction as a subject of study. This might be valuable if it led to a full investigation of the precise value of films in teaching and an economic estimate of their cost; to a psychological assessment of the extent to which students need visual aids to learning; and to a philosophical understanding of what the emphasis on the visual in education and entertainment will mean. It is not enough to produce clear or beautiful pictures: there must be understanding of what they are supposed to do.

<sup>1</sup> Obtainable quarterly from the Publishing Manager, B.M.A. House, Tavistock Square, London, W.C.1, at 12s. 6d. an issue or £2 2s. a year.  
<sup>2</sup> Chilton, L. V., *Med. biol. ill.*, 1952, 2 (No. 2, April), 91.

Meanwhile, as a further step into the Visual Age in medicine, an exhibition of medical illustration opens in the Old Library at B.M.A. House on June 14, and continues till June 28 before moving to the medical school at Manchester University for display from July 7 to 19. It is the work of the medical group (about 250 strong) of the Royal Photographic Society and of the Medical Artists Association, and contains wax models, colour transparencies, composite museum exhibits and teaching panels, as well as medical teaching films. It is a show which demands critical attention from everybody, and not merely the photographer and draughtsman, whether amateur or professional. The medical illustrators are a very active growing body of people. In this Visual Age, are they doing the work that is needed?

### THE HONOURS LIST

The medical profession will wish to congratulate all those of their number whose names appear in the Birthday Honours List (see p. 1299). Sir Cecil Wakeley's great services to surgery are recognized in his elevation to the baronetage. In addition to being a busy practising surgeon and President of the Royal College of Surgeons, Sir Cecil is actively associated with the editorship of three periodicals, and since 1919 has been a lecturer in anatomy in the University of London. Dr. Walter Elliot, whom we like to think of first and foremost as a medical man who was once Minister of Health, is made a Companion of Honour in recognition of his many distinguished services to his country. Sir Neil Cantlie, recently Director-General of the Army Medical Services, is made a K.C.B. The honour of Knighthood has been bestowed on Dr. W. E. Hume, F.R.C.P., emeritus professor of medicine in the University of Durham, Dr. E. Laurent, member of executive and legislative councils in Mauritius, and Group Captain H. R. G. Poate, F.R.C.S., honorary consulting surgeon of the Royal Prince Alfred Hospital, Sydney. Among the other honours we may note the C.M.G. bestowed on Dr. Charles Wilcocks, director of the Bureau of Hygiene and Tropical Medicine and editor of its two abstracting journals, and the C.B.E. on Professor Alan Moncrieff, well known as a medical journalist as well as a paediatrician, and on Dr. Ritchie Russell, consulting neurologist and editor of the *Journal of Neurology, Neurosurgery, and Psychiatry*.

### HONOUR THE SURGEON

Cambridge University paid a fitting tribute last week to a surgeon who can wield the pen as mightily as the scalpel, and who in learning and oratory sustains the ideal of the medical man as a member of a learned profession. Sir Gordon Gordon-Taylor, welcomed as *chirurgus nulli secundus*, was made a doctor of science (*honoris causa*) on June 5 in company with other distinguished men. The Orator hailed him as a pioneer in the transfusion of blood, as a former orator of the Medical Society of London, and as one who with his hand had relieved the sufferings of many.