

TRANSCENDENTALISM

Jaspers's Metaphysics. By A. Lichtigfeld, Dr. Jur., D.Phil. (Pp. 120 + xviii. 10s. 6d.) London: Colibri Press Ltd., 1954.

This work by Dr. Adolph Lichtigfeld is most welcome for two main reasons: firstly, because Karl Jaspers—that eminent Swiss philosopher—has exercised a great influence on theological thought; and secondly, because the English-speaking world will now be the richer for a deeper awareness of that influence.

Jaspers has concerned himself since 1932 with the principle of transcendentalism, and in the course of his speculations has recognized 3 possible modalities of transcending. The 1st consists in transcending the limits of empirical existence, with a view to putting the subjective activity of the Self into a position of infinite possibilities; the 2nd consists in illuminating empirical experience by our own individual subjective experience—which is a form of existential analysis; and the 3rd consists in the metaphysical act of cognition, which is directed to the equation of existence with ultimate reality.

In order to clarify the philosophic position of Jaspers, Lichtigfeld has written a necessarily ponderous introduction, but this, we fancy, will appeal in the main to readers who have some fundamental training in philosophy. The author, in order to indicate the evolution of Jaspers's philosophy, has most painstakingly catalogued the viewpoints of the earlier masters, but it would have been an advantage to the average reader if Lichtigfeld had rendered a more adequate and perspicuous synthesis of them. Students of philosophy will finally want to know: Has Jaspers given the answer to King David's interrogation: 'O, what is man that Thou art mindful of him, and the son of man that Thou heedest him'??

We would say in all humility that Jaspers's answer misses the mark, in that it fails to take cognizance of that natural unity which the reviewer has designated 'the human continuum', and has represented by the notation: The Body-Mind-Spirit-Environment. Jaspers, by labouring under the influence of Berkeley's pluralistic idealism, splits up this natural unity, and treats the parts as independent entities instead of segments which are functionally related to one another. Furthermore, he tends to regard the psyche as an independent variable occupying a place of dominance in the scheme of things; but in doing so he is virtually giving philosophic sanction to the age-old vogue of psychic escapism in a world of harrowing social realities which cry for solution. We hold rather with Dewey that the process of thought has no object outside of social experience, and no being of its own outside such experience. Thus, thinking is not a thing apart from perceiving, but the two are interactive, or mutually dependent. The process of thought, or ideation, is not an independent phenomenon, but is evoked by social situations; and in so far as it proves to be an effective instrument in dealing with the specific social situations by which it is evoked, it is true of those social situations.

We would break another lance with Jaspers and say that, as man is not only *homo psychologicus* but also *homo sociologicus*, the quality of his inter-personal relations in a given society must inevitably determine the quality of knowledge, and of truth. The truth of an idea is thus, correspondingly, a mark of its social acceptability. The mental processes productive of social truth constitute the processes of reason and express themselves in the rules of logic.

Finally we would urge that students of Jaspers, as elucidated by Lichtigfeld, would do well to appreciate the fine distinction between the terms 'truth' and 'reality'. Truth resides in the psyche, and is of necessity relative, fluid, and changeful, being contingent upon the body of knowledge obtaining at a particular time; but reality does not reside in the psyche, for it is not synonymous with experience; it is external to, and independent of, mental activity. This is the *coup de grâce* which neo-realistic philosophy, shaped by such thinkers as Meinong, Husserl, Russell, Whitehead, Moore and Alexander, has dealt to man's narcissistic egocentrism. It is, in our view, the answer to Jaspers's transcendentalism—a term, by the way, which was introduced by Kant, but subsequently deprecated by him.

L.F.F.

CHROMATOGRAPHY

British Medical Bulletin: Chromatography. Vol. 10, No. 3, 1954. Price 15s.

A few years ago medical men were somewhat vaguely aware of the use biochemists made of adsorption onto alumina and other inert solids in the preparation and purification of biological substances. They may have wondered, too, why it always seemed to retain what was wanted and to reject what was not wanted, or *vice versa*.

A few may have heard of Tswett who in 1910 passed a solution of chlorophyll through a column of finely powdered calcium carbonate and obtained a series of coloured bands as the different pigments passed down the column at differing speeds. Biochemists themselves were dilatory in exploiting this technique in the analysis of other mixtures of pigments; a process to which they gave the name of chromatography, and which has now been so vastly extended and applied to all sorts of substances, pigmented and colourless, organic and inorganic.

Dent's article in the *Lancet* (1946) on the separation of amino-acids in the urine by means of paper chromatography called the attention of most of us doctors to the possibilities of this new method in clinical medicine. Gordon, Martin, Syngé and Conden (1943, 1944) had shown that paper could be used with advantage in the place of the column of magnesia, alumina or chalk as the stationary phase in the proceeding.

This had the advantage that very small quantities of material could be analysed very simply and the further advantage that a square of paper could be used first in one direction with one solvent and then in a direction at right angles to the first with another solvent. The result was that instead of a single row of spots some of which might overlap and be impossible to identify, there was a wide scattering of spots over the whole of a large sheet, and the possibility and certainty of identification were increased many times.

The increase in the applications of chromatographic methods in biochemistry in the last few years has been phenomenal. It has been applied to nearly all classes of substances of biological interest—amino-acids, peptides, sugars, porphyrins, antibiotics, steroids, inorganic ions. It can be used for preparative as well as for analytical work. Instead of relying on natural colours we now have a remarkable array of reagents for identification of the products, and these are reinforced by fluorescence or the quenching

of fluorescence, changes in surface tension, radio-activity and biological tests.

But a price has had to be paid for all this. The days of a drain pipe, a lead tray, a bit of paper and an amateur have gone, and we can soon expect a journal of chromatography, a journal of clinical chromatography, and the appointment of a full time chromatologist to all well-staffed hospitals.

How technical the subject has become can be gauged by reading the Chromatography number of the *British Medical Bulletin* published by the Medical Department of The British Council. The authors of the articles include many British pioneers whose names are familiar to all who have dabbled in chromatography: Martin, Williams, Consden, Partridge, Dent and many others. Between them they discuss very fully and helpfully the principles and applications of chromatography, and describe the methods and apparatus used for various purposes. Anyone without special experience who wishes to make use of these methods can hardly do better than start by consulting this collection of very valuable papers.

Gordon, A. H., Martin, A. J. P. and Synge, R. L. M. (1943): *Biochem. J.*, **37**, Proc. xiii.

Consden, R., Gordon, A. H. and Martin, A. J. P. (1944): *Biochem. J.*, **38**, 224.

Dent, C. E. (1946): *Lancet*, **2**, 637.

Tswett, M. (1910): *Chromofilii w rastitelnom i schivotnom mirje.*

Tipogr. Warszawskago utschebnago Okruga, Warsaw.

Quoted from Williams, R. J. P. (1954): *Brit. Med. Bul.*, **10**, 165. G.C.L.

A TREATISE ON DERMATOLOGY

The Skin. By Arthur C. Allen, M.D. (Pp. 1048 + xv, with 495 illustrations. £10 12s. 6d.) St. Louis, U.S.A. C. V. Mosby Co. 1954.

Contents: 1. Embryology, Anatomy, and Physiology. 2. Definitions, Regional Distribution of Dermatoses, and Eponyms. 3. Histologically Identifiable Non-infectious Dermatoses. 4. Panniculitides. 5. Lupus Erythematosus, Dermatomyositis, Scleroderma, and Poikiloderma. 6. Lesions of Collagen and Elastic Tissue. 7. Dermatoses of Allergic Origin. 8. Vesicular Dermatoses. 9. Non-vesicular Virus and Rickettsial Diseases. 10. Pyodermas and Specific Bacterial Infections. 11. Tuberculosis, Sarcoidosis, Berylliosis, and Leprosy. 12. The Treponematoses and Nonspirochetal Venereal Diseases. 13. Mycoses. 14. Eruptions Caused by Protozoa, Arthropods, and Helminths. 15. Psychocutaneous Disorders and Miscellaneous Desquamative Dermatoses. 16. The Vitamins. 17. Vascular Disorders. 18. Abnormalities of Pigmentation. 19. Disorders of Cutaneous Appendages. 20. Non-Neoplastic Lesions of Oral Mucosa. 21. Classification of Tumors of the Skin. 22. Verrucae, Epithelial Cysts, and Tumors of Appendages. 23. Carcinomas of the Skin and Mucosa and Miscellaneous Tumors of the Oronasal Cavity. 24. Nevi and Malignant Melanomas. 25. Xanthomatoses and Lipid and Nonlipid Histiocytoses. 26. Tumors of Mesenchymal Tissues. 27. Tumors of Vessels. 28. Tumors of Hematopoietic Tissues.

This beautiful book is what the dermatological world has been waiting for. It is of great physical and intellectual dimensions, every page being packed with excellent photographs and invaluable descriptions of macroscopic and microscopic skin pathology. Unfortunately, apart from the frontispiece, there are no coloured photographs, always so particularly helpful in dermatology, but, no doubt, the inclusion of these would have made the price totally prohibitive.

'The Skin' is a clinico-pathologic treatise and the author achieves magnificently what he sets out to accomplish, a work which is a happy combination of clinical and histological dermatology. He makes it abundantly clear that 'the old order changeth, yielding place to new' wherein the modern physician no longer regards dermatology as the isolated step-sister of general medicine but looks upon the skin as the mirror not only of the mind but of countless pathological processes in the body as a whole. In his preface he states that 'it would seem that the capacity to study disease as a whole, rather than in artificially broken segments, should continue to comprise one of the great pedagogic aims in medicine' and, in his discussion on disseminated lupus erythematosus, he remarks that the observation of the L.E. phenomenon by Hargraves, Haserick and others 'is undoubtedly one of the most provocative discoveries in the field of cutaneous-visceral integration'. He hopes to implement 'a long-neglected interest in this enormously important organ of the body (the skin) which previously has been almost completely disregarded in books on general pathology'.

Professor Allen is generous with his references, there are more than two thousand of them. Modern concepts are clarified and the profuse nomenclature of dermatology is pared down to the simplest

possible proportions. A long list of dermatologic eponyms is given. His classification of cutaneous manifestations of morbid processes is most acceptable. It savours of the unexpected, however, to find porphyria amongst the allergies, presumably because of the alleged element of photosensitivity in its etiology, instead of in the later section on inborn errors of metabolism. Unusual, too, is the pride of place given to lupus erythematosus, dermatomyositis and scleroderma, which have a chapter to themselves just preceding 'Lesions of Collagen and Elastic Tissue'. The reason for this is that the author considers that neither disseminated lupus erythematosus nor dermatomyositis is a diffuse vascular disease or a generalized disease of collagen.

If a dermato-pathologist as omniscient as Professor Allen can be said to have specialized, it is patent from his superb writings on neoplasms of the skin that these have held his interest for many years.

The latest modes of therapy are outlined, although the author does not profess to give details of treatment. Once the diagnosis has been made, on clinical and histological grounds, it is easy enough to find the best form of treatment minutely described in other works.

This treatise is not a *vade mecum* or simple handbook for those who are mildly interested in dermatology but a sound book of reference for teachers and post-graduate students of dermatology, pathology, medicine and surgery. No medical library will be complete without it.

J.W.

RABIES

Rabies. Bulletin of the World Health Organization, Vol. 10, No. 5, 1954. (Pp. 703-866. 10s.) Geneva: World Health Organization. 1954.

Contents: Part I. Virus Research. 1. Biological Modification of Rabies as a Result of its Adaptation to Chicks and Developing Chick Embryos.

Part II. Control of Rabies in Animals. 2. Experimental Studies on the Duration of Immunity in Dogs Vaccinated against Rabies. 3. The Control of Rabies in Malaya through Compulsory Mass Vaccination of Dogs. 4. A Field Demonstration of Rabies Control Using Chicken-Embryo Vaccine in Dogs. 5. Ecology of Rabies in Southern Rhodesia. 6. La Rage et sa Prophylaxie et Autriche. 7. Rabies in Canada, with Special Reference to Wildlife Reservoirs. 8. Transmission of Rabies by Bats in Latin America.

Part III. Prevention of Human Rabies. 9. Antiserum in the Prophylaxis of Rabies. 10. Phenolized Vaccine Treatment of People Exposed to Rabies in Southern India. 11. Prevention of Human Rabies: Treatment of Persons Bitten by Rabid Wolves in Iran. 12. Treatment of Wounds Inflicted by Rabid Animals. 13. Recent Advances in the Preparation of Antirabies Vaccine Containing Inactivated Virus. 14. Avianized Rabies Virus in Man. 15. Experimental Allergic Encephalitis in Animals, and its Bearing upon the Etiology of Neuroparalytic Accidents Following Antirabies Treatment in Man. 16. Can Man be Protected against Rabies?

This is another most valuable bulletin in a valuable series of bulletins issued by the World Health Organization. This publication gives a picture of recent developments in the field of rabies, particularly in the methods for its control.

Rabies is a disease which has been endemic for many years in the Orange Free State, the South Western Transvaal and the North Western Cape Province. In this region of South Africa it affects particularly the yellow mongoose or rooi meerkat *Cynictis penicillata*, which has been responsible for most infections in man. Within the last 5 years, however, the introduction of canine rabies across the Limpopo and its spread in the Northern and Eastern Transvaal has greatly increased the problem confronting the medical and veterinary authorities of this country. This bulletin is therefore of timely interest in South Africa and also in a number of other countries, notably Canada where, too, rabies has assumed greatly increased importance within the last few years.

Dr. Hilary Koprowski describes his studies, indicating that living chick-embryo-adapted virus can be used both as a vaccine administered before exposure to rabies virus and as an adjunct to anti-serum in the protective treatment of animals after exposure.

Dr. Harald Johnson of the Rockefeller Foundation discusses the relative value of phenolized vaccine and the Flury strain of live virus and notes that the immunity conferred by the latter is superior.

The methods adopted for the control of rabies in Malaya, Israel, and Southern Rhodesia are described in detail. The description of the ecology of rabies in Southern Rhodesia by Dr. J. S. Adamson will be of particular interest to South African readers, especially his conclusion that the use of the Flury-strain avianized vaccine is satisfactorily controlling the disease in most of the areas involved.

The value of antiserum in the prophylaxis of rabies is discussed by Dr. K. Habel, and he concludes it has a definite place in the treatment of patients who have suffered severe exposure. The value of phenolized vaccine in the treatment of people exposed to rabies in India is analyzed by Dr. Veeraraghavan.

The methods of treating wounds inflicted by rabid animals are described in detail by competent authorities.

The methods of preparing rabies vaccine and the dangers associated with its administration are discussed, and finally Dr. K. F. Meyer summarizes the present position of this historic disease and concludes that rabies is a preventable disease and that all present-day scientific and administrative knowledge must be marshalled to erase the blot on 20th century civilization, which the continued prevalence of rabies constitutes.

J.G.

CHEMOTHERAPY—ANTIBIOTICS

Recent Advances in Chemotherapy. Vol. III. Antibiotics. By F. C. O. Valentine, F.R.C.P., and R. A. Shooter, M.A., M.D. (Pp. 292 + viii. Third Edition. 27s. 6d.) London: J. and A. Churchill Ltd. 1954.

Contents: 1. Penicillin. 2. Drugs Used in the Treatment of Tuberculosis. 3. The Tetracyclines, Aureomycin and Terramycin. 4. Chloramphenicol. 5. Bacitracin, Polymyxin, Erythromycin and Carbomycin. 6. Resistance. 7. General Principles. 8. Staphylococcal Infection. 9. Streptococcal and other Infections of the Upper Respiratory Tract. 10. Infections of the Lung. 11. Bacterial Endocarditis. 12. Tuberculosis. 13. Acute Meningitis. 14. Enteric Fever. Bacillary Dysentery, Infantile Gastro-Enteritis, Pre-Operative Suppression of Bowel Organisms, Peritonitis. 15. Urinary Infections. 16. Actinomycosis, Anthrax, Tetanus, Gas Gangrene, Erythema Serpens. 17. Venereal Diseases. 18. Spirochaetal Diseases other than Syphilis. 19. Brucellosis, Tularaemia and Plague. 20. Infections with Rickettsia and Viruses. Index.

Previous editions of this series were prepared by the late G. M. Findlay, who at the time of his death in 1952 had made considerable progress with the preparation of the present volume. F. C. O. Valentine and R. A. Shooter have now completed the work and in doing so have successfully summarized the modern methods of treatment of the bacterial, rickettsial and virus diseases amenable to antibiotic therapy.

From the index it can be seen that the authors have covered a very wide field, with a bibliography at the end of each section enumerating the most important papers of the last 5 or 6 years.

In addition to a careful analysis of the various methods of antibiotic therapy they have presented much useful advice about the choice of drug, dosage and route of administration, and where doubt exists they have not hesitated to say so. Each chapter is most readable, and at the same time the subject headings are so arranged as to make details of information readily available for reference purposes.

The authors have succeeded in producing a well balanced guide to the most recent information on antibiotic therapy for the physician.

A.K.

BOOK ABOUT BREAD

Bread. By Lord Horder, G.C.V.O., M.D., F.R.C.P., Sir Charles Dodds, M.V.O., M.D., D.Sc., Hon. Sc.D. (Camb.), F.R.S. and T. Moran, C.B.E., D.Sc., Ph.D. (Pp. 185 with 20 illustrations. 18s.) London: Constable & Company, Ltd., 1954.

Contents: 1. The History of Bread. 2. The Wheats of the World. 3. The Chemistry of Wheat, Flour and Bread. 4. The Main Features of the Milling and Baking Processes. 5. Improving Agents. 6. The Digestion and Assimilation of Bread. 7. Bread and Nutrition. 8. The Enrichment of Flour and Bread. 9. Bread and Health. Conclusions. Index.

One realizes, after a perusal of this interesting book, that our scientific knowledge of flour and bread is now quite advanced. A great deal of this advance occurred during the recent war, when such restrictive measures as alterations in the extraction rate of flour were introduced. It was then found that much less was known than was realized about the implications of such a simple step, and this led on to research into the distribution of vitamins, mineral salts etc., in different parts of the wheat grain.

The phytic acid controversy was another practical problem which arose at this stage and resulted in the addition of chalk to flour in England.

These and many other investigations as well as the history of milling, milling processes and the place of bread in nutrition, are described in detail.

This book, as the authors say, is not for the specialist research worker, who would find it elementary, but for the doctor, science teacher, social worker and dietician. To these we can wholeheartedly recommend it.

J.T.I.