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sitivity on other media which inhibit swarming (*e.g.*, 6% agar, McConkey medium). Our results suggest that penicillin is more actively bacteriostatic against *Proteus* species in the absence of electrolytes. Whatever the cause of the phenomenon, salt-free media are unsuitable for penicillin-sensitivity tests of these organisms. No similar phenomenon was noted with bacteria of other genera and the penicillins, or with other antibiotics, except for the streptomycin group, the activity of which against all bacteria is depressed by sodium chloride.

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The November 1963 Issue

THE NOVEMBER 1963 ISSUE CONTAINS THE FOLLOWING PAPERS

The saline added in the blood-citrate-saline mixture alters the final osmotic pressure of the original dilutions and this must be allowed for in plotting the graph, as shown in Table II.

DISCUSSION

The micromethod described has shown an acceptable degree of accuracy and is useful for the detection of abnormal red cell fragility in children.

The buffers recommended by Dacie (1956) have not been used in these experiments; instead the *p*H of the distilled water and saline used have been checked, as recommended by Suess *et al.* (1948). While 0·1 ml. of capillary blood has been used in these experiments, slight variations in this volume should not modify the results, and this has in fact been found to be the case.

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LOCUM BUREAU

The locum bureau provides useful work for pathologists who have retired or who are temporarily out of work.

Anyone interested in being a locum or in employing a locum should get in touch with:

Dr. Anne Gibson,
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A simple method for the use of water melon seed preparations in the estimation of blood urea

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Soya and jack beans are commonly used for the preparation of urease in the estimation of blood urea but Damodaran and Sivaramakrishnan (1937) demonstrated that the seeds of water melon (*Citrullus vulgaris*) had a high urease content. The raw water melon seeds without any treatment have been used as a source of urease in this work. The potency of urease was high in all healthy seeds as compared with Merck urease. Both these preparations of urease gave results with standard urea solutions and blood, which were within the range of error as advocated by King and Wootton (1956).

The presence of urease in the soya bean (Soja) was demonstrated as early as 1909. Annett (1914) found the high urease potency in the family *Papilonaceae* including jack bean and horse gram (*Dolichos biflorus*) but the activity of the latter deteriorated rapidly on storage. Klein (1933) demonstrated the presence of urease within the family *Cucurbitaceae*. Damodaran and Sivaramakrishnan (1937) concluded that the urease from the seeds of the water melon are superior to those from the soya and jack beans as it is free from the errors that pertain to the latter ones.

MATERIALS AND METHODS

PREPARATION OF UREASE FROM WATER MELON (*CITRULLUS VULGARIS*) SEEDS. The seeds which did not look healthy were discarded. The healthy seeds were washed in tap water to remove the sticky juice of the fruit from the surface and then dried in the air in the shade. They were then kept at room temperature. For use, seeds were cut in the longitudinal axis with a fine knife along the borders. Three preparations were made:—

1 Half of the pulp of a seed chopped into fine particles;
2 a number of pulps cut into fine particles and preserved at room temperature;
3 a number of pulps cut into fine particles and preserved in the refrigerator.

UREASE (MERCK, E) This is manufactured from jack bean meal. The reagents and method of urea estimation were the same as described by King and Wootton (1956) except for the Nessler reagent which was made up by the method of Bock and Benedict (Harrison, 1957).

RESULTS AND DISCUSSION

The common mode of preparation (Van Slyke and Cullen, 1914) of urease requires a large quantity of acetone.

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provide some background for clinicians new to the field. The section giving detailed instructions for the carrying out of the various tests is excellent. A valuable list of references and a good index are provided. G. LOEWI

TEXTBOOK OF VIROLOGY, 4th ed. By A. J. Rhodes and C. E. von Rooyen. (Pp. 600; 86 figures; 85 tables. 108*s*.) Baltimore: Williams and Wilkins Company. 1962.

The last edition of this well-known textbook was published in 1958. In the intervening four years advances in medical virology have been so rapid that the book has had to be completely rewritten. The major part of the revision has been carried out by the authors and the essential character of the book remains the same, but in this latest edition they have been assisted by five contributors who have undertaken the revision of special sections of the book. The end-result is quite exceptionally good, and there is no doubt that the authors have achieved their chief purpose to present an up-to-date account of medical virology suitable for students and practitioners of medicine, public health, microbiology, and other public health sciences.

The main change is that the chapters have been completely re-arranged; no longer are they grouped according to clinical and epidemiologial features but instead they have been re-arranged according to biological and antigenic properties of the causative viruses. On the whole this change has worked out quite well. The first 10 chapters deal with fundamental properties, technical methods, pathology, pathogenesis, and immunity with special chapters on cell culture by K. R. Rozee, on statistical methods by B. W. Reid, and on tumour viruses by L. Siminovitch. They are all excellent, informative and up to date and set the standard for the rest of the book. Here will be found concisely set out the answers to many everyday problems on viruses.

The next 15 chapters deal with several groups of viruses, herpes virus, poxvirus, myxovirus, and other respiratory infections and hepatitis. They give a clear idea of the rapid progress that has been made. D. M. Mclean, of Toronto, brings up to date what is known about the arborviruses. This section of 20 chapters is a veritable mine of information and superbly well written and illustrated.

The chapters on the enterovirus group provide an excellent review of the general properties of these viruses and their clinical syndromes. Poliomyelitis is discussed by A. J. Beale in a comprehensive chapter which covers the recent and important developments in methods of prevention.

The illustrations and tables are uniformly excellent but the method of numbering them according to chapters instead of in consecutive order seems rather pointless. This new edition, which is extremely well produced, maintains the high standards of previous editions. It is strongly recommended to those for whom it is intended. It will be found a most useful book to have around and should certainly be readily available in every hospital laboratory.

J. A. DUDGEON

The College of Pathologists

MEMBERSHIP WITHOUT EXAMINATION

FOUNDER MEMBERSHIP Applications from those eligible will be considered up to 30 April 1964. The names of some 1,100 senior pathologists have now been accepted by Council.

MEMBERSHIP A According to the Articles of Association, medically qualified pathologists reaching consultant status or its equivalent during the three-year period April 1963-66 will automatically be eligible for admission to Membership.

B The Council now intends to proceed to consider application by those who have not yet reached consultant status or its equivalent, but whose training and experience would appear to exempt them from the whole or part of the forthcoming examination for Membership.

Application is now invited from pathologists, other than those undergoing training, who have held an established hospital, teaching, or whole-time research appointment for five or more years.

Each of those wishing to claim exemption will be considered on an individual basis: such application should be made as soon as possible and, in any event, not later than 30 April 1964.

C In certain circumstances, Membership may be granted to those submitting published works on pathology or related subjects adjudged to be of sufficient distinction.

Application forms and further information may be obtained from the Registrar, The College of Pathologists, 12 Grosvenor Crescent, London, S.W.1.