THE

JOURNAL OF HYGIENE

(Founded in 1901 by G. H. F. Nuttall, F.R.S.)

EDITED BY

G. S. GRAHAM-SMITH, M.D., F.R.S.

READER EMERITUS IN PREVENTIVE MEDICINE IN THE UNIVERSITY OF CAMBRIDGE

AND

E. T. C. SPOONER, M.D.

PROFESSOE OF BACTERIOLOGY AND IMMUNOLOGY IN THE UNIVERSITY OF LONDON

IN CONJUNCTION WITH

J. O. IRWIN, M.A., D.Sc., Sc.D., F.S.S. Of the Medical Research Council's Statistical Research Unit, London School of Hygiene and Tropical Medicine

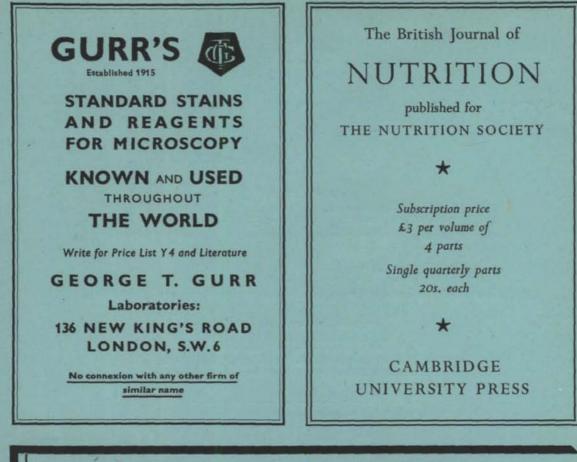
G. S. WILSON, M.D., F.R.C.P., D.P.H. Director, Public Health Laboratory Service (Medical Research Council, London)



CAMBRIDGE UNIVERSITY PRESS LONDON: BENTLEY HOUSE, N.W.1 NEW YORK: 51 MADISON AVENUE

> PRESS LIBRAR^a

Price Twenty Shillings net





H. K. LEWIS & Co. Ltd., can supply all Standard Works and Textbooks on Hygiene and Sanitary Science, and all branches of Medicine and Surgery. Large selection available. Catalogues on request.

Please state interests when writing

MEDICAL AND SCIENTIFIC LIBRARY

ANNUAL SUBSCRIPTION FROM ONE GUINEA

The Library includes all standard and recent works in all branches of Hygiene and Sanitary Science.

Bi-monthly List of New Books and New Editions added to the Library sent post free to any address regularly on request.

F	LONDON: H. K. LEWIS & Co. Ltd., 136 GOWER STREET, W.C.1
	A constantly charging large stock of Medical and Scientific Literature on view, classified under subjects. Libraries or small collections purchased.
	SECONDHAND DEPARTMENT: 140 GOWER STREET, LONDON, W.C.1
k	Prospectus post free on application

Business hours: 9 a.m. to 5 p.m. Saturdays to 1 p.m. Established 1844

BRAND MICHROME BRAND

MICROSCOPICAL STAINS AND BIOLOGICAL REAGENTS

Adonitol Arabinose Azo Carmine Azur 1, 2, A, B, C & L Brom Phenol Red Cresyl Fast Violet Cedarwood Oil p-Dimethylaminobenzaldehyde Eosin Azur

Field's Stain Giemsa Stain Haematoxylin Isamine (Pyrrol) Blue Janus Black Janus Green, B Janus Red Janus Yellow Leishman Stain Maltose Mannitol May-Grunwald Stain Methyl Red Night Blue Nile Blue Purpurin Rosolic Acid Saffron Sudan Blue Thioflavine, T Thionin Toepfer's Reagent Toluidine Blue Trypan Red Vital Red Wright's Blood Stain

4 of the new Michrome brand products manufactured only by Edward Gurr, Ltd:

Haematoxylin Powder (Ehrlich). For simple and rapid preparation of Ehrlich's Haematoxylin solution ready for immediate use, without ripening.

Borrel's Blue Powder. Offers a rapid, simple and economical means of preparing the solution. **Cedronol.** The superfine cedarwood oil for immersion lenses. Refractive index 1.520. Miscible with xylol. **Optoil.** A xylol miscible, synthetic, non-sticky, non-drying immersion oil. Refractive index 1.515.

MICROSCOPE SLIDES, COVERSLIPS & LABORATORY SUNDRIES

For uniform high quality, reliability and immediate delivery stipulate MICHROME BRAND prepared only by:

EDWARD GURR, LTD.

108 WATERFORD ROAD, WALHAM GREEN, LONDON, S.W. 6, ENGLAND Telephone: Renown 2011 Cables: Gurr, Renown 2011, London

Price lists on application

Now ready: "Microscopic Staining Techniques" No. 1 (24 pages) 1s. 6d., No. 2 (62 pages) 3s. 6d.

The Quarterly Journal of Medicine Edited by W. RUSSELL BRAIN, CRIGHTON BRAMWELL, W. D. W. BROOKS, D. M. DUNLOP, H. L. MARRIOTT, ROBERT PLATT CONTENTS NEW SERIES. Vol. XIX. No. 73. JANUARY 1950 (Vol. XLIII of the continuous series) The Mode of Action of Salicylate in Acute Rheumatic Fever. By J. REID, R. D. WATSON and D. H. SPROULL. With Plate 1. The Treatment of Spontaneous Hypoglycaemia due to Hyperplasia of the Islets of Langerhans. By GEORGE GRAHAM and WILFRID G. OAKLEY. With Plate 2. A Clinical and Pathological Study of Renal Disease. Part II. Diseases other than Nephritis. By ROBERT PLATT and J. DAVSON. With Plates 3 to 6. Congenital Toxoplasmosis. By W. G. WYLLIE and H. J. W. FISHER. With a Note on the Pathology by I. A. B. CATHIE. With Plates 7 and 8. Postmenopausal Osteoporosis, Clinical Manifestations, and the Treatment with Oestrogens. By IAN A. ANDERSON. With Plates 9 and 10. Single Numbers 10s. 6d. net each Subscription 35s. per annum Volumes 45s. net Bound Volumes 40s. net Cloth Cases 5s. net **OXFORD UNIVERSITY PRESS, LONDON E.C.4**

Hygiene, Vol. 48, No. 1

SELECTIVE TOXICITY AND ANTIBIOTICS

The Third Symposium of the Society for Experimental Biology

CONTENTS

W. A. SEXTON. The Organic Chemist's Approach to Chemotherapy.

FRANCIS LESLIE ROSE. The Differential Activity of Certain Anti-Malarial Agents against Protozoa and Bacteria.

R. A. PETERS. The Study of Enzymes in Relation to Selective Toxicity in Animal Tissues.

H. N. RYDON. The Design of Bacterial Inhibitors Modelled on Essential Metabolites.

GEORGE BROWNLEE. Antibiotics Derived from Bacillus polymyxa.

L. R. BISHOP. The Resins of Hops as Antibiotics.

HUBERT MARTIN. Systemic Insecticidal Properties Induced in Plants by Treatment with Fluorine and Phosphorus Compounds.

A. R. TRIM and A. E. ALEXANDER. Surface Activity and Permeability as Factors in Drug Action.

J. E. WEBB. The Permeability of Insect Cuticle.

E. M. LOURIE. Selectivity of Drug Action in Protozoal Blood Infections.

D. D. WOODS and R. H. NIMMO-SMITH. Aspects of the Selective Toxicity of Sulphonamides and other Anti-Metabolite Inhibitors.

M. R. POLLOCK. The Effects of Long-Chain Fatty Acids on the Growth of *Haemophilus* pertussis and other Organisms.

E. KODICEK. The Effects of Unsaturated Fatty Acids on Gram-Positive Bacteria.

ERNEST FREDERICK GALE. The Action of Penicillin on the Assimulation and Utilization of Amino-Acids by Gram-Positive Bacteria.

C. N. HINSHELWOOD. Adaptation of Bacteria to Resist Drug Action (with special reference to Bact. lactis aerogenes).

E. W. SIMON and G. E. BLACKMAN. The Significance of Hydrogen-Ion Concentration in the Study of Toxicity.

G. W. IVENS and G. E. BLACKMAN. The Effects of Phenylcarbamates on the Growth of Higher Plants.

G. E. BLACKMAN, K. HOLLY and H. A. ROBERTS. The Comparative Toxicity of Phytocidal Substances.

ADRIEN ALBERT. Therapeutic Interference: Some Interpretations.

L. A. ELSON. Some Effects of Diet on Toxicity—The Influence of Diet on the Induction and Inhibition of Tumours.

C. E. LUCAS. External Metabolites and Ecological Adaption.

P. W. BRIAN. The Production of Antibiotics by Micro-Organisms in Relation to Biological Equilibria in Soil.

35s. net

CAMBRIDGE UNIVERSITY PRESS