

# CONTENTS

	PAGE
CARROLL, F. D., CLEGG, M. T. and KROGER, DIETRICH. Carcass characteristics of Holstein and Hereford steers. (With One Text-figure)	1
CHOU, K. C. and WALKER, D. M. The effect on the rumen composition of feeding sheep diets supplying different starches. I. The variation in rumen composition of sheep fed lucerne or wheat as the sole diet	7
CHOU, K. C. and WALKER, D. M. The effect on the rumen composition of feeding sheep diets supplying different starches. II. The partition of nitrogen, pH, volatile fatty acids, protozoal numbers, enzymic activity and certain other chemical constituents	15
ASHTON, G. C., FALLON, G. R. and SUTHERLAND, D. N. Transferrin ( $\beta$ -globulin) type and milk and butter-fat production in dairy cows	27
REDDY, G. R. Effect of varying quantities of dicyandiamide on the utilization of nitrogen by several crops from sodium nitrate and ammonium sulphate	35
HANLEY, F., RIDGMAN, W. J. and JARVIS, R. H. The effect of previous cropping and manuring on the yield of potatoes. (With Five Text-figures)	39
HANLEY, F., RIDGMAN, W. J. and JARVIS, R. H. The effects of leys and their management on the yield of succeeding wheat crops on heavy land	47
BEVERIDGE, J. L., HANLEY, F. and JARVIS, R. H. The effects of consolidating the soil beneath potato seed tubers and of inter-row grubbing on the growth and yield of the crop	55
DONEY, J. M. The fleece of the Scottish Blackface sheep. IV. The effects of pregnancy, lactation and nutrition on seasonal wool production	59
STODDART, J. L. Seed ripening in grasses. I. Changes in carbohydrate content. (With Two Text-figures)	67
WIDDOWSON, F. V., PENNY, A. and WILLIAMS, R. J. B. Side-placing urea and other nitrogen fertilizers for spring barley. (With Two Plates)	73
ROLLINS, W. C., CARROLL, F. D. and the late ITTNER, N. R. Comparison of the performance of $\frac{1}{4}$ Hereford- $\frac{3}{4}$ Brahman calves in a variable climate	83
LAWRIE, R. A., POMEROY, R. W. and WILLIAMS, D. R. Studies in the muscles of meat animals. IV. Comparative composition of muscles from 'doppelender' and normal sibling heifers	89
TALIBUDEEN, O. and ARAMBARRI, P. The influence of the amount and the origin of calcium carbonates on the isotopically exchangeable phosphate in calcareous soils. (With Two Text-figures)	93
GUNN, R. G. Levels of first winter feeding in relation to performance of Cheviot hill ewes. I. Body growth and development during treatment period. (With Four Text-figures)	99
GUNN, R. G. Levels of first winter feeding in relation to performance of Cheviot hill ewes. II. Body growth and development during the summer after treatment, 12-18 months. (With Four Text-figures)	123

*The Journal of Agricultural Science* is issued every other month in parts of about 136 pages with plates and figures, three parts constituting a volume. Two volumes yearly.

Quotations for available back volumes and parts may be obtained on application to the Cambridge University Press.

Papers for publication should be typewritten or written in a very legible hand, and may be sent to SIR JOHN HAMMOND, School of Agriculture, Cambridge, or to the associate Editors. Other communications should be addressed to the University Press, Cambridge.

If Plates in excess of one per 24 pages of text or coloured plates are submitted the author may be asked to bear the cost of such Plates.

The lettering on text figures should be clear of the illustration and indicating by blue pencilled lines the desired position.

Bibliography should be given under the heading of 'References' in the following form:

Surname of authors (in alphabetical order), initials, date of publication (in brackets), title of Journal (abbreviated according to the *World List of Scientific Periodicals*), volume and page of reference. In the text a reference should be quoted by the author's name and date (in brackets).

All names of Journals and books are set in italics; they should be indicated on the typescript by underlining.

Contributors will receive twenty-five copies of their papers free.

The subscription price, payable in advance, is 65s. net per volume (post free); single numbers 27s. 6d. net. Subscriptions may be sent to any bookseller, or to The Cambridge University Press, Bentley House, 200 Euston Road, London, N.W. 1.

Subscription price in the U.S.A. is \$12.50 per volume; single number \$4.75. Enquiries should be addressed to the Cambridge University Press, American Branch, 32 East 57th Street, New York 22, N.Y.

*Printed in Great Britain at the University Printing House, Cambridge  
(Brooke Crutchley, University Printer)*