

LAND RECLAMATION

Reclaiming Land for Agriculture

By Moses Griffith, J. F. H. Thomas and R. Line. (Agricultural and Horticultural Series.) Pp. 119+16 plates. (London: Crosby Lockwood and Son, Ltd., 1951.) 12s. 6d. net.

TO those who can recall the time when meat, cheese and eggs were basic articles in the Englishman's diet, this book will bring hope that their children may live to see those conditions restored. The wastage of our greatest, and potentially inexhaustible, source of wealth—the land—is a national scandal. Mr. Moses Griffith estimates that there are five million acres of hill and moorland alone in Britain “capable of very substantial improvement”, and he and Messrs. J. F. H. Thomas and R. Line show that the task of reclamation with modern implements and technique would not be difficult on the hill land, the chalk land and the fen and silt land which they respectively discuss.

Sir George Stapledon, in a comprehensive introduction, points to the very high cost of land reclamation and emphasizes the economic importance of regional planning, and of intensive study of plant and animal ecology, not forgetting human requirements; for unless men and women find social satisfaction on the reclaimed land, it will revert to waste. It is to be hoped that a people which spent nearly £40 million on almost fruitless land reclamation in East Africa will not be deterred by the initial cost from replenishing its larder from its own soil.

It is on the intrinsically infertile, and often inaccessible, hill lands that the economic factor is most intractable. The crawler tractor and other machines have, however, greatly facilitated the task of cultivation, and the aeroplane should equally help to solve the problem of fertilizing these lime- and phosphate-starved soils. Work at Aberystwyth has shown that remarkable improvement can often be effected by ploughing and reseeded with improved herbage, usually after a pioneer crop like rape which is grazed to provide dung and consolidation of the soil by stock. Mr. Griffith leaves the impression that, although many intricate questions remain unanswered, enough success has already been achieved to make very large-scale reclamation of hill land a practical proposition now.

Reclamation of chalk land presents rather easier problems. Much of the land has been highly farmed with sheep in the past and has only recently become partly or completely derelict. Considerable areas were cultivated to exhaustion during the First World War, and these could be restored to productivity fairly easily with adequate fertilizing. Among the major tasks are the clearance and disposal of scrub growth on abandoned land, much of it of high productivity, and the restoration of the rich valley pastures. There is scope for intensification of both arable and livestock farming, and the appropriate land management is better understood than is the case on mountainous hill land.

In the Fen country “the cost of reclamation of the fen is not such an important consideration as the returns per acre that can be expected from this very exceptional soil”. Around the Wash there are a hundred square miles of this country awaiting enclosure and development. Good drainage is the key to fenland farming, and much reclaimed land has been allowed to go derelict through neglect of drains. Methods of reclamation and management are

well understood, and what are chiefly needed are men, money and machinery. It is to be hoped that the Government will give high priority to this first line of defence—at least as vital to our security as rearmament, for the imperative need to grow our own food will always remain, whatever the international outlook.

G. V. JACKS

THE HORMONES

A Symposium on Steroid Hormones

Edited by Edgar S. Gordon. Pp. xiii+396. (Madison, Wis.: University of Wisconsin Press, 1950.) 6.50 dollars.

Recent Progress in Hormone Research

The Proceedings of the Laurentian Hormone Conference. Vol. 5. Edited by Gregory Pincus. Pp. viii+537. (New York: Academic Press, Inc., 1950.) 8.80 dollars.

The Hormones

Physiology, Chemistry and Applications. Edited by Gregory Pincus and Kenneth V. Thimann. Vol. 2. Pp. ix+782. (New York: Academic Press, Inc., 1950.) 12.50 dollars.

Vergleichende Physiologie

Von Prof. W. von Buddenbrock. Band 4: Hormone. (Lehrbücher und Monographien aus dem Gebiete der exakten Wissenschaften: Reihe der experimentellen Biologie, Band 9.) Pp. 492. (Basel: Verlag Birkhäuser, 1950.) 47.50 Swiss francs.

THE first three of these four volumes were published in the United States in 1950, and to some extent cover the same ground. The fourth is a German work which deals with less-recent endocrinological knowledge.

The “Symposium on Steroid Hormones” is a report of a conference which took place at the University of Wisconsin in 1949, and is concerned with the chemistry, biosynthesis and metabolism of steroid hormones and with their physiological effects. Some of the facts presented at the conference have not previously been published, so that, in addition to a general review, the volume edited by Dr. E. S. Gordon will need to be referred to as a source book of original observations. The ground covered by the contributors to “Recent Progress in Hormone Research”, Vol. 5, which is a report of the proceedings of the Laurentian hormone conference for 1949, is much the same as that which was explored at the Wisconsin conference for 1949, and again a large number of the contributions deal to a considerable extent with new observations.

Neither of these meetings was concerned to cover the whole field of hormone research. This is the purpose of the two volumes published under the title of “The Hormones”, and edited by Gregory Pincus and Kenneth V. Thimann. Vol. 1 appeared in 1948 and dealt with plant hormones; hormones in invertebrates; the internal secretion of the pancreas; and various aspects of the steroid hormones, as well as with the chemistry of the anterior pituitary hormones. Vol. 2 deals with the physiology of ovarian hormones; of androgens; of the adrenal cortex; of the thyroid; of the pituitary hormones; as well as with the chemical control of nervous activity; and concludes with a section on clinical endocrinology. In their preface, the editors point out that any work in which separate sections are contributed by