

AGRONOMY



Pretty Corn

CURIOUS, how long farmers insisted on raising merely "pretty" corn, rather than corn that would give them the highest possible yield per acre.

For two or three whole generations after the first sod-breaking plow was stuck through the tough roots of the grass of ages on the upland prairies of Illinois and Iowa, farmers thought of corn in terms of the handsomest individual ear. In their county and state fair contests, they had the standard types gradually worked out and finally firmly established for them: so many inches long, so many in diameter, so much for depth of grain, so much for diameter of cob; grains neatly turned over butt, as neatly filling up the tip. An array of "points" as formidable as that faced by "bench" dogs or chickens—and as formal

That these big, artistic-looking ears did not necessarily give the farmer most bushels for the labor and money he spent on each acre seems never to have occurred to him—certainly not to the corn judges at the fairs or to the seedsmen in the towns. The big ear, not the big yield, was what counted.

Then there came upon the scene a young farm paper editor, son and grandson of other editors of the same paper. He had been to college, had heard of the basic discoveries of the Austrian monkscientist Mendel, of the experiments of the Danish plant breeder, Johannsen, of the pioneer work of the American geneticist Shull. He took up certain experiments in corn breeding where Shull had laid them down, crossing and recrossing scores of the most unpromising-looking "pure lines" of corn, with only

one thing in mind: more bushels to the acre, not prettier ears at the fair.

Finally he succeeded. His "Hibred" strains of corn proved themselves time after time able to out-yield the best of the "handsome" corns by from four to ten bushels to the acre. His critics were silenced, the farmers increasingly convinced. They began to plant his corn.

Now by a strange ironical twist of fate that same young editor, Henry A. Wallace, sits as Secretary of Agriculture in President Roosevelt's cabinet. And one of his most stressing problems is to find out what to do with too much corn!

Yet no man with even elementary sense would advocate sending the farmer back to the old low yield per acre. It may be necessary for a time to administer economic artificial respiration to agriculture; but it would be idiotic while doing so to bleed the patient at the same time.

Science News Letter, August 19, 1933

ENGINEERING

British Dry-Dock Could Handle 100,000 Ton Vessel

BRITAIN now has a gigantic drydock, claimed to be the world's largest, capable of accommodating a vessel of 100,000 tons if such a ship should ever be built. It is located at Southampton and holds 260,000 tons of water. The huge concrete structure is 1,200 feet long, 135 feet wide and 59 feet from cope to floor.

The extension of Southampton docks, begun in 1924 and just completed, ranks as one of the great civil engineering feats in recent times. The large dry-dock is just one of the features of this development. Dredging of 20,000,000 tons of mud, gravel, sand and clay from the harbor, the reclamation of 400 acres of land, and the building of a massive quay wall over a mile and a third long were features of the development.

Science News Letter, August 19, 1933

First Glances at New Books

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Botany

THE FRESH-WATER ALGAE OF THE UNITED STATES—Gilbert M. Smith—McGraw-Hill, 716 p., \$6. Teaching botanists, as well as research botanists specializing in fields other than phycology, have long felt the need of a single, complete, convenient yet authoritative volume on the fresh-water algae. Prof. Smith now fills that need most admirably. His discussions are compact and to the point, and give all the information which the botanist will ordinarily need. Determinations are carried as far as the genus, which is enough for usual purposes; illustrations are simple and clear. The book automatically becomes a necessity for reference shelves of college and university botanical laboratories.

Science News Letter, August 19, 1933

Ornithology

HISTORY AND PRESENT STATUS OF THE BREEDING COLONIES OF THE WHITE PELICAN—Ben H. Thompson—U. S. National Park Service, 82 p., 2 maps. A detailed examination of the recent history, present status, and probable prospects of one of the most picturesque, albeit one of the most argued-about, of our native birds. This publication constitutes No. 1 of a new series: Occasional Papers of the Wild Life Division of the U. S. National Park Service.

Science News Letter, August 19, 1933

Child Care

How to Care for the Baby—Violet Kelway Libby—Plymouth Press, 110 p., \$1. A convenient and helpful manual for the use of the new mother in everyday care of the healthy, happy, sun-bathed, and cod-liver-oil fed 1933 infant.

Science News Letter, August 19, 1933

Health Education

A SUGGESTED TEACHING UNIT FOR SECONDARY SCHOOLS ON TUBERCULOSIS AND ITS PREVENTION—Jean V. Latimer—Massachusetts Tuberculosis League, 27 p., 20c. Designed to give school children "an attitude of objective curiosity" about tuberculosis so that if symptoms of the disease appear in themselves or members of their families, prompt steps will be taken toward early and accurate diagnosis. The pamphlet should be helpful to teachers in attaining this object.

Science News Letter, August 19, 1933

Entomology

RESULTATS SCIENTIFIQUES DU VOYAGE AUX INDES ORIENTALES NEERLANDAISES—V. Van Straelen—Mus. R. d'Hist. Nat. de Belgique, vol. IV, fasicules 4, 5, 6 and 7. These monographs describe coleoptera, hymenoptera, lepidoptera and diptera collected by the expedition.

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First Glances at New Books

Additional Reviews On Page 127

Physics

THE UNIVERSE OF LIGHT—Sir William Bragg-Macmillan, 279 p. \$3.50. Sir William, master physicist and popularizer, takes as the thread of his story that old rivalry between two theories of light which has been one of the most powerful contributors to the development of science. The book can be recommended without hesitation for reading by layman and physicist alike. The chapter headings are: The Nature of Light, the Eye and Vision, Colour, The Origins of Colour, The Colours of the Sky, The Polarization of Light, Light From the Sun and Stars, The Röntgen Rays, The Wave and the Corpuscle.

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Psychology

THE MIND OF THE CHILD-Charles Baudouin, trans. from Fr. by Eden and Cedar Paul—Dodd, Mead, 282 p., \$3. Child psychology from the point of view of the psychoanalyst. In his "Hints to Educators," the author says: "According to the findings of psychoanalysts, a child of seven has already gone beyond the age when its affective life is plastic, for the decisive shocks come before the sixth and even before the fourth year. A child of tender age should never be handed over to the care of second-rate persons. Psychoanalysis emphasizes the fact that a very young child's psychical development is already well advanced and extremely complex, so that education is of primary importance from the outset.'

Science News Letter, August 19, 1933

Zoology

BIOLOGY OF THE PROTOZOA—Gary N. Calkins—Lea and Febiger, 607 p., 2 colored plates, \$7.50. A second edition of one of the most successful of books about protozoa.

Science News Letter, August 19, 1933

Mysticism

THE LIVING UNIVERSE—Sir Francis Younghusband—Dutton, 252 p., \$3. Mysticism hung upon the peg of science. The blurb recites:

"Astronomers say that the Universe is running down and that eventually light and heat, which are now being radiated, will be exhausted and the Universe will become stone dead and icy cold. But Sir Francis Younghusband, mystic and traveler in the Far East, does not share this gloomy view. By a new

and mystic interpretation of the principles of Evolution, he shows that, on the contrary, the Universe is an ever living organism, which is impelled upward by a great Cosmic Mind towards the foundation of the Kingdom of God on earth."

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Botany

WILD FLOWERS ROUND THE YEAR—Hilda M. Coley—Gerald Howe, Ltd., London, 220 p., 5 s. A well gotten up book on English wild flowers, nicely illustrated by the author. It will be of interest to readers in the United States and Canada partly because many of the genera, and even of the species, are ours as well, partly as showing the original forms of some of our cultivated flowers, and finally because many of the flowers are old familiar friends by name in the classics of English literature.

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Technology-Economics

THE GREAT GOD WASTE—John Hodgson—John Hodgson, Eggington., Beds., England, 127 p. A species of technocracy from a British viewpoint. Mr. Hodgson discusses communal waste, the emergent order and the melting pot, often with fantastic touches.

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Psychiatry

PSYCHOANALYSIS AND MEDICINE: A STUDY OF THE WISH TO FALL ILL—Karin Stephen—Macmillan, 238 p., \$2.50. The Freudian theory and methods are here presented simply and clearly for the benefit of medical and other scientists who are not familiar with the methods and aims of psychoanalysis.

Science News Letter, August 19, 1933

Geology

HISTORICAL GEOLOGY—Raymond C. Moore—McGraw-Hill, 673 p., \$4. Into a field already well occupied by good textbooks in geology, this new text can come with good expectations of winning a good place, for it is excellently conceived, straightforwardly written and abundantly and excellently illustrated.

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Psychology

THE APE AND THE CHILD—W. N. Kellogg and L. A. Kellogg—McGraw-Hill, 341 p., \$3. A report of the authors' novel experiment in "humanizing" the ape. The book is a detailed report of scientific tests and the constant observation of an infant ape which lived and played as companion with the Kelloggs' young son who was almost the same age.

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Education

THE EDUCATIONAL TALKING PICTURE—Frederick L. Devereux—Univ. of Chicago Press, 222 p., \$2. Through the participation of the University of Chicago in a twenty-part series of educational talking pictures of university level, the use of talkies has been introduced seriously to the educational world. The head of the producing company in collaboration with educational authorities, analyzes in this comprehensive book the problems, technique and results of educational talking pictures.

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Technology

PETROLEUM CODE HANDBOOK, 1933—Leonard M. Fanning, editor and publisher, \$5. Facts and figures of the petroleum industry for 1932 are included in this publication together with a considerable amount of commercial and technical information and buyer's guide data.

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Nutrition

ROWLAND'S DIABETIC COOK BOOK—compiled by John Rowland—Omro Herald Print, 110 p., \$2.50. This book cannot be recommended, since it claims to tell the diabetic how and what to eat so that he can get along without insulin. This is a procedure which should be undertaken only under the direction of the patient's physician. In fact, diets and menus for the diabetic, with or without insulin, should be prescribed in each case by the physician who is familiar with the patient's condition, according to modern medical opinion.

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