

SCIENCE

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RECENT DEVELOPMENTS IN AGRICULTURAL SCIENCE.¹

CONTENTS.

Recent Developments in Agricultural Science:

A. D. HALL..... 449

Scientific Books:—

Chittenden on Physiological Economy in Nutrition: PROFESSOR GRAHAM LUSK.
Turner and Hobart on the Insulation of Electric Machines: DR. LOUIS BELL.
Gumplowicz's Grundriss der Soziologie: PROFESSOR J. Q. DEALEY..... 464

Discussion and Correspondence:—

Breeding Beneficial Insects: DR. L. O. HOWARD. *Nomenclature at the International Botanical Congress at Vienna:* DR. F. S. EARLE. 'Clon' versus 'Clone': DR. CHAS. LOUIS POLLARD..... 467

Special Articles:—

A Diagram or Chart for finding the Sun's Azimuth: R. A. HARRIS. *Analysis of the Mississippi River:* C. H. STONE. *Functions of a Transplanted Kidney:* ALEXIS CARREL and C. C. GUTHRIE..... 469

The University of Florida..... 473

Stations for the Determination of the Variations of Latitude..... 474

Professor Bjerknes's Lectures..... 475

Permian Glaciation in South Africa..... 475

Scientific Notes and News..... 475

University and Educational News..... 480

In dealing with the science applied to a particular industry like agriculture it is convenient to draw a distinction between the class of investigations which seem to be contributions to knowledge pure and simple and those which aim at an immediate bearing upon practice. Both must be regarded as equally 'pure' science, since both should call for the same qualities of imagination and exact reasoning which characterize true scientific work; but while the one may appeal readily to the intelligent practical man, the value of the other can only be appreciated by the expert. The dividing line between these two branches of the subject is never a sharp one; indeed the most abstract and remote investigations are always cutting into the region of practice in a wholly unexpected fashion; but still the distinction I have indicated can be readily felt. To take an example—for the proper interpretation of many questions connected with the texture of soils and their behavior under cultivation—it is necessary to arrive at a clearer understanding than we now possess of the intimate causes which lead the finest particles of material like clay to unite together into floccules, or coagula, under the influence of traces of dissolved salts. Such investigations will touch upon some of the most debatable ground belonging to the theory of solutions and the constitution of matter, and can never be made intelligible to the

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¹ Read at the South Africa meeting of the British Association for the Advancement of Science.