wherever black locust is suitable, this variety is being intensively studied by members of the Department of Agriculture. It differs not only in bark, stem and flower characters from the other described varieties of this variable species, but also in the exceptional durability of its wood when in contact with the soil. The description of this variety will be published later in a circular of the U. S. Department of Agriculture under the name of *Robinia pseudoacacia* var. *rectissima*. The botanical study of this new variety was conducted by Dr. Oran Raber for the Division of Plant Exploration and Introduction, Bureau of Plant Industry.

B. Y. MORRISON

EFFECT OF RADIUM RAYS ON LIVING CELLS

IN the "Science News" department of SCIENCE for August 16, 1935, page 26, there is an item from Science Service on "The Effects of Radium on Cells." This note is based on the published work of Professor Frederick B. Flinn. The item contains these statements: "The effects of radium on living cells are always in the direction of breakdown and death; its powerful radiations, principally of alpha particles, *never act to stimulate more active growth*. . . . In no case was it found that a radioactive solution, even the weakest, was stimulative of extra growth."

In correspondence with the writer Professor Flinn confirms the correctness of this report of his results[1] and states: "My work with radium was with chicks' embryonic cells and I found no evidence of any stimulating effects in the presence of radium. This has also been confirmed by observation in the human beings and animals. These observations have been more or less confirmed by the Speer Laboratory in England. I did very little work with plants, but the work that I did do did not lead me to believe that there was any stimulating effect."

In his paper above cited from the *American Journal of Cancer,* Professor Flinn says (p. 357): "The experiments here described yielded no evidence of direct stimulation by the amounts of radium to which the cultures were exposed. . . . Plant growth has at this time been judged in a qualitative manner, but at the end of six months there was no indication of a stimulated growth."

Since the inference that radium rays "never act to stimulate more active growth" is directly opposed to conclusions based on extensive studies with plants, it is thought worth while to call the attention of others (who may be engaged in research on the physiological effects of radium rays) to these contrary conclusions, based chiefly on work with animals and man.

The writer's pioneer work is embodied in Memoirs of the New York Botanical Garden, Vol. IV, 1908. A summary, also by the writer, of work on the effects of radium rays on the life processes of plants since the discovery of radium by Madame Curie is now in press and will be published shortly under the auspices of the National Research Council.

C. STUART GAGER

BROOKLYN BOTANIC GARDEN

GERMAN BOOKS AND PERIODICALS

SUPPLEMENTING the announcement in SCIENCE of July 12, 1935, I have been informed by an official of the German government that the 25 per cent. reduction on German books, periodicals and continuations became effective beginning September 9, 1935.

Contrary to previous advice, I understand that this reduction will be granted to all foreign purchasers of German books and periodicals and not limited to libraries alone. The letter reads in part ". . . *auf das gesamte buchkaufende Publikum* im Ausland auszudehnen. . . ." The italics are mine.

CHARLES H. BROWN

IOWA STATE COLLEGE LIBRARY,
AMES, IOWA

SCIENTIFIC BOOKS

OUR REMOTE INTELLECTUAL ANCESTRY

Primitives and the Supernatural. By LUCIEN LEVY-BRÜHL. New York: E. P. Dutton & Co. Pp. 405. $5.00.

CULTURES near to our own we interpret as philosophies; older, alien, simpler ones as anthropology. They are all products of the same cerebrating organ. That insight is one of the many wisdoms of the neomoderns, ourselves.

To determine which of the extinct anthropoids is the presumptive ancestral *homo* is a matter of contentious evidence; to restore the ancestral order of *sapience* that gave him the rest of his appellation is no less so. The evidence is the reports of observant travelers, latterly of trained ethnologists, in regard to the beliefs and customs of tribes still believing and still behaving more or less according to the hypothetical prime-ancestral pattern.

To our modern critical eyes, the reconstructed physical appearance of the earliest anthropoid that could prophetically claim a place in human genealogy does not look invitingly human; and the accounts of his brutal habits and strange designs for living render

[1] *Radiology,* 23: 331–338, 1934; and *American Journal of Cancer,* 22: 351–358, 1934.