SCIENCE

FRIDAY, AUGUST 9, 1918

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MSS. intended for publication and books, etc., intended for review should be sent to The Editor of Science, Garrison-on-Hudson, N. Y.

SOME ENERGY RELATIONS OF PLANTS[1]

THE science of botany is about one hundred and fifty years old. Great changes have occurred during this time in the point of view from which botanists look at the plant.

The first scientific interest in plants was in merely naming them. In the latter part of the eighteenth century Linnæus extended the use of generic names which were already in use, added species names for greater convenience in handling his herbarium specimens, and thus established the binomial system, now in universal use in naming plants. Thus was laid the foundation of taxonomy as the earliest phase of the science of botany.

Linnæus clearly saw that the next step in the advance of botanical knowledge was to be classification. He himself made some crude attempts at arranging plants in classes. His system he well knew to be artificial. He clearly foresaw that more complete knowledge of the structure of plants, particularly of their buds, flowers and fruit, would ultimately lead to the classification of flowering plants in a natural system. His successors were busy with the attempt to learn enough of this structure of reproductive parts to enable them to put plants into a systematic classification according to their natural relationships.

This gave rise to morphology as the second great phase of the advance of botanical

[1] Address as retiring president of the University of Washington Chapter, Sigma Xi, Seattle, June 4, 1918.