One can hardly fail to feel that this refusal to look with charity upon anything new only weakens Darwinism, and can but believe that Darwin himself would have been rather more broad minded. Darwin's position as the most stimulating mind of the nineteenth century stands secure, and he may well be ranked with Newton as one of the two great men that England has thus far produced. In this position he remains no less securely even if we do admit that the details of his great theory do not work out in all respects as he imagined them to do. We admire him not the less, but rather the more, as we learn that the descent theory, which must ever remain associated with Darwin's name, agrees with newly discovered facts as well as with those which Darwin himself knew.

But this volume of essays is written by an advocate, as eminently fitting for an anniversary volume, and it will form a necessary part of the Darwin bookshelf. Any light upon the personal life of the world's great men always has its interest and many a touch upon the life of Darwin given in these papers helps to render the great Englishman a live personality. The life of the man, his long struggle with ill health, his kindness and thoughtfulness for others amid his own suffering, his eagerness to give others even more than their share of credit for his discoveries and his own proverbial modesty, are anew impressed upon us as we read the unpublished letters and the newly given incidents in his life. The oft-quoted loss of appreciation of music and art, which Darwin admitted in his later life, are attributed by Poulton not to the result of scientific study, but to his constant suffering and ill health that made it impossible for him to have any comfort save in the, to him, one all-absorbing occupation of scientific study.

One new contribution of scientific knowledge is found in this volume in an essay upon "Mimicry in the Butterflies of North America," originally read in Baltimore in 1908. Complete mastery of this interesting subject is shown with a wealth of illustrative material. The historical development of mimicry in the western continent is traced in ingenious detail. But Poulton adds nothing, and admits that he can add nothing, to the puzzling question of the *cause* of mimicry. This still remains as great a puzzle as it has ever been, although it is enriched with an abundance of illustrative material by means of which Poulton is enabled to follow the migrations into North America of the successive types of butterflies.

H. W. CONN

SPECIAL ARTICLES

THE EARLIEST DESCRIPTION OF ŒNOTHERA LAMARCKIANA

IN working over the early records of *Œnothera Lamarckiana* I have recently discovered in the Sturtevant collection of the library of the Missouri Botanical Garden, a remarkable manuscript which proves that this plant was originally a species growing wild in Virginia, and that it was the first *Œnothera* introduced into European gardens, about 1614. There has been so much obscurity and doubt regarding the origin and early history of *O. Lamarckiana,* the plant upon which the weight of DeVries's mutation theory largely rests, that a document which proves definitely the facts just stated must be regarded as of prime interest and importance. The frequent claim that *O. Lamarckiana* probably originated in cultivation, either through hybridization or otherwise, is here shown to be without sufficient foundation.

The record in question is a long marginal note in a copy of Bauhin's "Pinax," published at Basil in 1623. The note is written in Latin, in archaic English script, and gives an accurate description of *O. Lamarckiana* as we now know it, though differing somewhat in one or two minor characters. The plants were grown from seeds obtained from Padua in 1619, and the description is evidently written from the living plants. It is remarkable for its accuracy, considering the time it was written, equaling in this respect descriptions which were published much later. The author of the marginal note is apparently one Joannis Snippendale, whose name, in similar handwriting, appears on the title page of the

book. The plant is described under Bauhin's name, *Lysimachia lutea corniculata,* the closely written description covering the whole margin of the page. Numerous marginal notes on other plants, by the same author, are found scattered all through the volume. Among the points mentioned in the description which make it certain that this plant was *O. Lamarckiana* and not *O. biennis* or *O. grandiflora,* the forms with which it has most frequently been confused, may be mentioned the following: (1) the flowers are large, 3 or 4 inches long; (2) the rosette leaves are long, pointed and obscurely sinuate; (3) there is present on the branches a type of hair arising from red papillæ;[1] (4) the buds are quadrangular. The first character distinguishes the plant from *O. biennis,* while either of the characters (2) or (4) make it certain that the plant is not *O. grandiflora.*

The differences from the *O. Lamarckiana* of our present cultures are that the rosette leaves seem to be narrower and paler green, and there are secondary branches. The last point is sometimes true of our present *O. Lamarckiana.* The characteristic crinkling of the leaves is not mentioned in this account; but it is definitely described in an independent account of an *Œnothera* from Virginia, published by another author in 1651.

This marginal note is the earliest description of an *Œnothera* now known to exist. I have not yet been able to learn anything regarding its worthy author, but he may have been connected with a garden in England, and he was certainly a close observer. The record is as complete and accurate as could be desired, to prove to one familiar with the characters of these forms the identity of the plants in question. It is safe to say that there are few American plants of which there is such an early accurate record as this.

DeVries called attention, in 1905, to records which showed that the *O. Lamarckiana* at present found in European gardens, and from which the plants of his cultures also originated, was introduced into Europe from Texas in 1860. The manuscript here referred to shows that the Virginia plant was very similar to, and possibly identical with, the form from Texas.

Other records, which I shall not refer to here, show that *O. Lamarckiana,* which must have been derived from the Virginia plants, had escaped and was growing wild in England as early as 1805, and probably much earlier. Cultures of this English form by MacDougal, and more recently by myself, have shown it to be almost or quite identical with the *O. Lamarckiana* of DeVries's cultures.

Owing to the authority of Linnæus, later writers failed to distinguish between large-flowered and small-flowered forms, both going under the name of *O. biennis.* Not until after *O. grandiflora* was introduced into Kew from Alabama in 1778, was *O. Lamarckiana* segregated as a separate form; first described by Poiret under the name *O. grandiflora,* for which Seringe afterwards substituted the name *O. Lamarckiana.* An unpublished description of *O. grandiflora* Ait., by L'Heritier, dated about 1788, is far more complete than the brief characterizations of Aiton and Willdenow, and is important in proving that the *O. grandiflora,* as we now know it from Alabama, was the form described. This manuscript I have also seen.

Photographs and transcriptions of these manuscripts, together with other important historical data regarding these forms, whose identity has been subject to question, will be published at another time. Of these records, the first mentioned is evidently of extreme importance, showing as it does that a form at least closely similar to our present *O. Lamarckiana* was the first *Œnothera* introduced from Virginia into European gardens, and hence that it did not originate in cultivation.

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[1] This character is also present in some forms of *O. grandiflora.*

Ophidian Notes at Thompson's Mills, North Georgia

The scarlet snake (*Cemophora coccinea* Blumenbach) appears to be more or less widely