plant should have been shared by a later distinguished philologist, Arthur Stanley Pease, who finds his chief diversion in botany.

CIRSIUM PALUSTRE (L.) Scop. MICHIGAN: border of wet woods, Lawson, Marquette Co., no. 3582; low woods, Michigamme, no. 3583; and seen in similar habitats to Houghton Co.

Cirsium palustre in northern Michigan is either indigenous (as it appears to be in Newfoundland)<sup>1</sup> or, if introduced, has remarkably succeeded in selecting habitats where it simulates indigenous species. Its behavior in Michigan (whether it suddenly spreads or remains quiescent) should be watched.

Krigia biflora (Walt.) Blake, forma glandulifera, f. nov., pedunculis superne glanduliferis.—With or apart from the typical glabrous-peduncled form of the species. Type: dry sandy spruce and pine barrens near Humboldt, Michigan, July 3, 1934, Fernald & Pease, no. 3584, in Gray Herb.

Typical Krigia biflora (Walt.) Blake, Rhodora, xvii. 135 (1915), has glabrous peduncles. So far as shown in the Gray Herbarium all the specimens from New England to West Virginia are without glands. Some from Kentucky, North Carolina and Tennessee have glandular peduncles; others, often of the identical collection (on the same sheet) are glandless. In the Great Lakes region, thence westward to Colorado, glandular peduncles occur on about one-third of the specimens in the herbarium. Here, again, glabrous and glandular peduncles are sometimes on the same sheet. All the material we saw in northern Michigan had the glands well developed. I cannot, however, look upon these plants as more than a recognizable form. They surely are not a separate species. Upon the collection of Bronson Barlow from Turin, Marquette Co., Michigan, June 21, 1901, was based Cynthia falcata Standley, Contrib. U. S. Nat. Herb. xiii. 356 (1911). One of the Barlow sheets is before me and I cannot separate it from much typical Krigia biflora except in glandular peduncles. Standley, in publishing Cynthia falcata, separated it solely on the "prominently aquiline-serrate upper leaves," the upper leaves of Cynthia virginica

the barometrical observations, the botany, and the charge of the accounts. But he took with him also his copy of Bopp, and the leisure moments be enjoyed during the expedition were, as far as possible, devoted to the fuller study of that work."—T. R. Lounsbury, William Dwight Whitney, Proc. Am. Acad. xxx. 580, 581 (1895).

In view of the frequent assumptions that W. D. Whitney, botanist of the Lake Superior expedition of 1849, was really J. D. Whitney, the distinguished geologist (the "W" being considered a misprint), and since the botanical report is entered in bibliographies merely under W. D. Whitney, the above excerpt from Professor Lounsbury's sketch is quoted as satisfactorily clearing the identity.

<sup>&</sup>lt;sup>1</sup> See Fernald, Rhodora, xxxv. 15 and 369 (1933).

(Krigia biflora) said to be entire. In his proposed new species the "fruit is as in C. virginica . . . A very different plant . . . , readily distinguished by the peculiar toothing of its leaves."

In the Barlow sheet in the Gray Herbarium the uppermost leaves (bracts) are entire, but the median and lower leaves have prominent divergent to curving variable teeth. Such teeth are seen on our collection from Gladstone, Michigan (F. & P., no. 3585) which, accordingly, would be Cynthia falcata. They occur on numerous other specimens with glandular peduncles and upon many with the peduncles glabrous: from Southbury, Connecticut; Mohegan, New York; Mount Bethel, Pennsylvania; Webster Co., West Virginia; Milwaukee, Wisconsin; Rantoul, Illinois, etc. The character depended upon by Standley as his fundamental specific one is too fickle. The plants with strongly developed glands are at least recognizable and may have some ecological significance. To take up Standley's specific epithet falcata to designate a glandular form would be quite misleading and is wholly unnecessary. Similarly, to take up for a glandular form of nearly transcontinental range the name C. viridis Standley, l. c. 357 (1911), given to the plants of New Mexico and Arizona (occurring also in Colorado) because of a reputed greener color, would be inappropriate. Consequently, I have given a new name and have designated a different type.

## EXPLANATION OF PLATES 352-380

Plates 352-354. Sufficiently explained in the legends.

PLATE 355. PHYLLITIS SCOLOPENDRIUM (L.) Newm.: Fig. 1, frond, × ½, from Larmor's Glen, Dundonald, Ireland, August 12, 1884, R. L. Praeger; Fig. 3, portion of stipe, × 10, from Ennis, Co. Clare, Ireland, Tidestrom, no. 11,256; Fig. 5, margin of fond, × 10, from Savoy, ex herb. Thurber.

P. Scolopendrium var. Americana, n. var.: fig. 2, frond, × ½, from Perryville, Madison Co., New York, August, 1903, *House;* fig 4, portion of stipe, × 10, from Ingalls Falls, Grey Co., Ontario, *Fernald*, no. 3040 (TYPE); fig. 6, margin of frond, × 10, from White Lake, east of Jamesville, New York, *Wiegand*, no. 5374.

Plate 356. Cryptogramma crispa (L.) R. Br., var. acrostichoides (R. Br.) C. B. Clarke: reproduction of original plate of *C. acrostichoides* in Hooker

& Greville, Icones Filicum, i. t. xxix.

Plate 357. Cryptogramma crispa, var. Brunoniana (Wallich) Fern.: reproduction of original plate of C. Brunoniana in Hooker & Greville, Icones Filicum, ii. t. clviii.

Plate 358. Pteridium aquilinum (L.) Kuhn, var. lanuginosum (Bong.) Fern., forma decipiens (Lawson) Fern.: portion of plant, × 3/5, from Caribou Hill, Black Lake, Megantic Co., Quebec, Fernald & Jackson, no 11,961.

Plate 359. Festuca ovina L.: fig. 1, panicle,  $\times$  1, from Glåmos, Norway, 1925, Dyring; fig. 2, spikelet, showing anthers,  $\times$  5, from Forked River, New Jersey, May 27, 1891, J. R. Churchill.

F. OVINA, var. DURIUSCULA (L.) Koch: Fig. 3, pancile, × 1, from Cambridge,