which some of the cited material has been identified, D. Vargasianum differs in its subscandent habit, its subcoriaceous, very prominently reticulate leaflets (those of D. Aparines are more nearly chartaceous), its densely canescent stem (that of D. Aparines is uncinate-hirsute throughout) and in its smaller flowers and loment-joints.

It should be noticed in the illustrations that the calyx figured with the loment is measurably smaller than that of the mature flower. This is so because the calyx withers in age and is usually quite shrunken

when the fruit becomes mature.

The author is indebted to Dr. Wm. R. Maxon of the United States National Herbarium and Dr. H. A. Gleason of the New York Botanical Garden for the generous loan of specimens, and to Miss Shirley Gale who drew the plate.

5. ON CERTAIN TYPE SPECIMENS IN FERNS.

BY C. A. WEATHERBY.

1. Further Types of Desvaux's Species

During the summer of 1937 I had opportunity to search further for Desvaux's types in the herbarium at Paris and to restudy some seen before. As I had anticipated, several more were found; a still more

prolonged search would doubtless disclose yet others.

Those found in 1937 are here reported upon. The form of my previous paper¹ is followed. As there, Desvaux's name is in all cases placed first and after it necessary synonymy, with the accepted name in small capitals. Except in special cases, only dates of publication are given. With Desvaux, 1811 refers to his paper "Observations sur quelques nouveaux genres de fougères et sur plusieurs espèces nouvelles de la même famille" in der Gesellschaft Naturforschender Freunde zu Berlin Magazin v. 297–330, t. VII, f. 4–7; 1813 to the translation of that article, with some additions, in Journal de Botanique appliquée iii; 1827 to "Prodrome de la famille des fougères" in Mémoires de la Société Linnéenne de Paris vi. 171–337. Two corrections in the nomenclature of my previous article are included.

I am much indebted to the authorities of the Muséum d'Histoire Naturelle at Paris for the privilege of consulting the rich collections there and especially to M. Metman for many helpful courtesies.

¹ On the Types of Desvaux's American Species of Ferns. Contr. Gray Herb. cxiv. 13–35 (1936).

Acrostichum luteum Desvaux (1827). PITYROGRAMMA AUREA (Willd.) C. Chr. Hemionitis aurea Willd. (1810). Notholaena lutea (Desv.) Moore.—Restudy of Desvaux's type shows that it is neither a Notholaena, as I at first supposed, nor a Pellaea, as positively stated (I know not on whose authority) in the Index Filicum, but a Pityrogramma. It agrees with no American species known to me, but in all minute characters with P. aurea of Madagascar. It is quite unlike that species, however, in its small and narrow fronds with reduced lower pinnae. I could find no other sheet at Paris from which Desvaux's fragmentary and wretchedly prepared material could have been taken. In view of the impossibility of referring it to any American species, there seems a strong probability that the ascription of it to South America is erroneous and that it really came from one of the early French collections in the Mascarenes. Because of the resemblance in detail I am referring it, hesitantly, to Pityrogramma aurea.

Acrostichum tereticaulon Desv. (1811). Notholaena flavens (Sw.) Moore. A. flavens Sw. (1806).—Desvaux himself made this reduction in his Prodrome (p. 212) and on his herbarium-label. There he also anticipates Moore in referring the species to Notholaena, but seems

never to have published on this point.

Adiantum rotundatum Desv. (1827). A. CHILENSE Kaulf. (1824) ?— A specimen of A. chilense in herb. Paris, labelled "Peru, Dombey" and accompanied by a tiny slip on which is written in Desvaux's hand "espèce que j'ai decrite," perhaps represents this species, though hardly to be taken as the actual type.

Asplenium denticulosum Desv. (1811).—The type is sheet no. 1263 in the Jussieu herbarium. As Alston has reported, the specimen is

Diplazium cristatum (Desr.) Alst.

Blechnum Brasiliense Desv. (1811).—The type is sheet no. 1390 in the herbarium of Jussieu. The current interpretation of the species is correct.

Cystopteris orientalis Desv. (1827). MICROLEPIA SPELUNCAE (L.) Moore. Polypodium speluncae L. (1753).—Here, as in the case of C. jamaicensis,² it is easy to see how the apparently lateral indusium led Desvaux to refer his species to Cystopteris, but hard to understand how anyone who had read his description, calling for "frondibus . . . sparse pilosiusculis; soris . . . margine sursum laciniarum; rachi hirto-pilosa," could have supposed it synonymous with C. fragilis. Yet it has been so referred, one writer following another, at least since Moore's Index and probably earlier.

¹ Journ. Bot. lxxxiv. 173 (1936).

² Vide Contr. Gray Herb. cxiv. 22 (1936).

Desvaux's specimen has the rachis and the costae above pubescent with short, soft, weak, articulated hairs. Rachis, costae, costulae, and veins beneath bear stiff, scattered, pointed, white, also articulated hairs.

Davallia magellanica Desv. (1811). D. SOLIDA (Forst.) Sw. Trichomanes solidum Forst. (1786).—The type is sheet no. 1950 in the herbarium of Jussieu. Desvaux himself in his Prodrome reduced D. magellanica to Humata solida, as he called it, and on his label corrected the habitat to something which I cannot make out, but which is plainly not America.

It may be noted that the rather numerous cases in which Desvaux gave wrong habitats were apparently not due to his own carelessness. He seems faithfully to have copied data from the original labels of the specimens he saw; the labels themselves were wrong. In particular a considerable number of Commerson's plants from Polynesia were somehow, as in this case, recorded as from the Straits of Magellan.

Dicksonia Millefolium Desv. (1827). Dennstaedtia dissecta (Sw.) Moore. Polypodium dissectum Sw. (1788), (not Forst. (1786), but validated by Swartz's transfer to Dicksonia in 1801).—Desvaux's published habitat is "India orientalis"; on his label, however, he placed a question-mark after it. His specimen is the more finely dissected phase of the American Dennstaedtia dissecta.

Gymnogramma chaerophylla Desv. (1811). Anogramma chaerophylla Desv. (1811). Anogramma chaerophylla Desv. (1811). Anogramma chaerophylla Desv. (1811). Anogramma chaerophylla Desv. (1811).

of Jussieu. The current application of the name is correct.

Hemionitis brasiliana Desv. (1827). Antrophyum Brasilianum (Desv.) C. Chr.—Desvaux's type exists and I have now seen it. The name is correctly applied to the species afterward described as A. subsessile Kze.

Hemionitis gigantea Desv. (1827). Antrophyum Giganteum Bory (1833). A. Desvauxii Moore (1858).—Desvaux's published description gives "insula Sancti-Thomae Antillarum" as the habitat of this species. On his label, however, he has erased this and substituted "Borbonia." The specimen is A. giganteum Bory of the Mascarene Islands. Bory, in publishing his species, made no mention of Desvaux, but may have been transferring the latter's name. Moore, misled, perhaps, by Bory's lack of reference to Desvaux and by the erroneous habitat given for Hemionitis gigantea, supposed it to be a distinct American species and transferred it to Antrophyum as A. Desvauxii, changing the specific epithet because of A. giganteum Bory. It appears, under Moore's name, as a species dubia of the West Indies in the Index Filicum.

Lomaria magellanica Desv. (1811). Blechnum tabulare (Thunb.) Kuhn. Pteris tabularis Thunb. (1800). Blechnum magellanicum (Desv.) Mett. (1856).—The type is sheet no. 1371 in the Jussieu herbarium. The species is correctly referred to B. tabulare sens. lat., but should the American plant be segregated from the African,

Desvaux's epithet must apparently be used for it.

Mertensia squamulosa Desv. (1813). GLEICHENIA SQUAMULOSA (Desv.) Moore. M. pedalis Kaulf. (1824). G. pedalis (Kaulf.) Spreng. (1827). Dicranopteris pedalis (Kaulf.) Looser (1936).—Reëxamination leaves no doubt in my mind that Mertensia squamulosa Desv. and M. pedalis Kaulf. are conspecific. Desvaux's specimen is well matched, in size as well as in other respects, by several Chilean specimens at

Paris. His epithet must be taken up for the species.

Nephrodium Kunthii Desv. (1827). Dryopteris patens (Sw.) Ktze. Polypodium patens Sw. (1788).—Desvaux gave no original description but based his species wholly on "Aspidium patens Kunth excl. syn." A specimen in the Humboldt herbarium labelled A. patens "Cumanacoa, Caripe" (two of the localities given by HBK.) is therefore to be taken as type. It is apparently good Dryopteris patens. The single pinna in Desvaux's herbarium is very similar and may have come from it. Nothing, indeed, is obviously missing from it as it is, but the rachis has been cut above the lower two pairs of pinnae and a portion apparently removed in order to make the blade fit better on the mounting sheet. From this removed portion Desvaux's fragment might have been taken.

Nephrodium Poiretii Desv. (1827). Dryopteris patens (Sw.) Ktze. Polypodium patens Sw. (1788).—Desvaux cited in synonymy "Polypodium pubescens Poir. . . excl. syn." and on his label wrote "habitat in Martinica in herb. Lam." A specimen in the Lamarck herbarium labelled, probably in Lamarck's hand, "de la Martinique la Barrère" and "Polypodium pubescens Dict." in

Poiret's, may be taken as type.

It consists of the upper half of a badly damaged lamina from which a pinna has been removed. The upper surface has a peculiar whitish appearance. Desvaux's also damaged pinna agrees perfectly with this specimen and no doubt is the missing one. His description fits it; in the manuscript diagnosis attached to his herbarium sheet he even notes the whitish upper surface, though, in publishing, he omitted this detail. Dr. Christensen has seen the specimen and has labelled it Dryopteris patens.

My foreboding that these two Nephrodia of Desvaux might prove

to have anticipated more recent segregates from D. patens1 was happily unfounded. The specimen from Jamaica which Desvaux labelled N. patens in his herbarium is a much more developed plant than either of the others, with long-linear, more gradually acuminate pinnae. N. Poiretii was described from a small, damaged and perhaps pathological individual; N. Kunthii, a plant of moderate development, falls between. None of the specimens has a rootstock or even a stipebase, so that their determination is not altogether certain. But Christensen's judgment certainly ought to be accepted for N. Poiretii; and D. patens is not only the most probable determination for N. Kunthii on morphological grounds, but also the most reasonable for an individual coming from a region where, in its immediate group, only D. patens is known.

Ophioglossum pedunculosum Desv. (1811). O. fibrosum Schumach. (1827).—This determination was made by Dr. R. T. Clausen, whose monograph of Ophioglossaceae has just appeared, from my photograph and notes; its correctness is, I think, beyond question. The habitat South America, which Desvaux himself questioned, proves

to be quite wrong.

Polypodium articulatum Desv. (1827), non (Sw.) Juss. ex Poir. (1804). P. Caceresii Sod. (1893).—In my previous paper Desvaux's name was inadvertently marked as that to be accepted. Being a later homonym of P. articulatum (Sw.) Juss. it cannot, of course,

stand; my entry should have read as above.

Polypodium Kunthii Desv. (1827). P. Rosmarinifolium Kunth (1822).—I was mistaken in saying that Desvaux's type was not P. rosmarinifolium; perhaps if I had said it was not the plant passing in American herbaria as that species I should have been more nearly correct. Actually it is not only P. rosmarinifolium but may well have been cut from the tip of Kunth's type specimen in the Humboldt herbarium. Both Kunth and Desvaux based their species on P. lycopodioides sensu HBK. Nov. Gen. & Sp. i. 6 (1815) and drew their diagnoses largely from that work. Kunth cites "P. Kunthii Devaux mss.?" in synonymy. Either Desvaux had not seen Kunth's publication, which he does not cite, or he preferred to maintain his own name.

Lehmann 4586, from Ecuador, cited by Hieronymus as P. rosmarinifolium and other specimens which, following him, have been referred to that species, differ from Desvaux's and Kunth's types in their acute fronds with slender, quite unmargined stipes. In the Kunth plant the lamina is obtuse and tapers at base into a broadly margined,

scarcely distinguishable stipe.

¹ Contr. Gray Herb. cxiv. 29 (1936).

Pteris acuminata Desv. (1811). P. Pungens Willd. (1810).—The type, missed by me in 1935, is in the general herbarium at Paris with duplicates in the herbaria of Jussieu and Lamarck. It is correctly referred to P. pungens. Desvaux knew of Willdenow's species but considered his own plant distinct.

Pteris Chilensis Desv. (1811).—The current interpretation of the

species is correct.

Pteris pectinata Desv. (1811). P. QUADRIAURITA Retz. (1791)? P. plumula Desv. (1827).—In its broad-based pinnae, its venation, and most details Desvaux's specimen seems to belong with P. quadriaurita. The lamina has, however, the (possibly injured) apex ending in a pair of pinnae instead of the usual single terminal one; and what are apparently the basal pinnae quite lack the elongate lobe on the lower side characteristic of P. quadriaurita. It might be guessed that the actual basal pinnae had been broken off; but if so the scar is so concealed by the folding over of the specimen in pressing as to escape my observation; and it also escaped Desvaux's. In his manuscript notes attached to the sheet he particularly comments on the absence of the elongate lobes.

Pteris reticulata Desv. (1811). P. DENTICULATA VAR. BRASILIENSIS (Raddi) Baker. P. brasiliensis Raddi (1819).—Desvaux's type, collected in Brazil by Dombey, is sheet no. 1301 in the herbarium of Jussieu. Desvaux in the Prodrome identified his species with P. brasiliensis, properly retaining his own earlier name, which is correct if the Brazilian plant is kept separate from P. denticulata.

Pteris siliculosa Desv. (1811). ONYCHIUM SILICULOSUM (Desv.) C. Chr.—This turns out to be the Asiatic species to which the name is now usually applied, with incorrect data of locality, not, as I had suspected

it might be, Pellaea fumariaefolia of Chile.1

Pteropsis vittarioides Desv. (1827). VITTARIA RUIZIANA Fée (1851–52). V. vittarioides (Desv.) Weath. (1936), non (Thouars) C. Chr. (1907).

Salvinia affinis Desv. (1827). S. NATANS (L.) All. Marsilea natans L. (1753).—Desvaux's species was referred to S. auriculata by Kuhn, whose annotation-label to that effect is on the type sheet. He seems to have been followed by everyone, including Herzog, the latest monographer of the genus. Desvaux's specimen looks unlike the usual run of S. natans; it differs therefrom, as he states, in its large, emarginate and rather more hispid floating leaves. It is well matched, however, by various specimens from eastern Asia which, like it, have

¹ Contr. Gray Herb. exiv. p. 34 (1936).

the technical characters of S. natans. Kuhn's determination was perhaps unconsciously influenced by Desvaux's citation of "S. natans Kunth excl. syn." and his geographic data. It may be significant that, although in the Prodrome Desvaux confidently gave "Cuba Hispaniolaque" as the habitat of his species, on his label he gave only "America" and that above the label on the type sheet is a small slip reading "America? S. affinis Desv."

2. ACROSTICHUM LANUGINOSUM WILLD. AND PTERIS AUREA POIR.

Acrostichum lanuginosum Willd. Schrift. Akad. Erfurt, 1802: 31, t. 3, f. 4; non Desf. (1800). A. scariosum Sw. Syn. Fil. 16 (1806). Cheilanthes scariosa (Sw.) Presl, Rel. Haenk. i. 65 (1825), as to name-bringing synonym, not as to plant described, which is Ch. myriophylla Desv. Notholaena scariosa (Sw.) Baker in Mart. Fl. Bras. i. pt. 2, 540 (1870), as to name-bringing synonym and in part as to material included. Ch. ornatissima Maxon, Smithson. Misc. Coll.

lxv. pt. 8, 3 (1915).

There is no specimen labelled A. lanuginosum in the Willdenow herbarium. There is, however, one labelled A. scariosum on the mounting sheet and placed in a species-cover on the outside of which the name scariosum is also written, over an erasure so thoroughly made that the original name is completely obliterated and the paper so scratched that Willdenow had to make two attempts before he could write the new name clearly. The cover-label also bears the diagnosis "fronde bipinnata foliolis reniformibus, squamis scariosis obtectis" which, except for the substitution of "subrotundis" for "reniformibus," is exactly the diagnosis of A. lanuginosum as pub-This specimen agrees well with Willdenow's illustration except for the somewhat closer spacing of the pinnae1 and the absence of an odd pinna with a small basal lobe figured in the plate on the left side. Since A. scariosum Swartz was a renaming of A. lanuginosum and Willdenow accepted the renaming in his edition of the Species Plantarum (v. 125 (1810)), there seems no doubt that he also accepted it in his herbarium and that this specimen, similar to the original illustration and accompanied by the original diagnosis, is the type of A. lanuginosum and therefore of A. scariosum. Willdenow's plate appeared in a rather rare publication; it is therefore reproduced here, in plate IV, with a photograph of the specimen for comparison.

¹The artist might well have placed them farther apart for the sake of clearer delineation.

In its conspicuous tuft of castaneous, almost entire rhizome-scales, its narrow, inrolled pinnae and the copiously fibrillose scales of the lamina, their filaments and narrow tips covering the upper leaf-surface, the specimen clearly belongs with the species described as Cheilanthes ornatissima Maxon. In its apparently long stipe and relatively short, truncate-based lamina it is unlike the usual habit of this species, though rather long-stiped fronds do occur. Kuntze (Linnaea ix. 85) makes the observation that Willdenow's drawing represents a mutilated specimen. This also occurred, independently, to me. The Willdenow specimen shows, indeed, no obvious evidence of mutilation; but scars of broken-off pinnae might be concealed by the dense covering of scales on the rachis, and one pinna seems to have disappeared even since the illustration was made.

A second specimen (of *Cheilanthes myriophylla* Desv.) is in the cover of *A. scariosum*; but since it does not at all agree with Willde-

now's plate, it cannot be taken as type.

For the sake of completeness and of the instruction as to what not to do which may be drawn from it, the nomenclatural history of the species may be briefly summarized. Willdenow not only gave it an untenable name and, as noted above, figured a seemingly aberrant or injured specimen, but recorded it as from Mexico, where it is not known. Swartz, finding Willdenow's name preoccupied, substituted A. scariosum, citing A. lanuginosum as a synonym, taking his diagnosis and other data directly from Willdenow and drawing his epithet from the latter's description. Presl, who saw Willdenow's material, transferred the species to Cheilanthes, using Swartz's epithet and duly citing the Swartzian and Willdenovian synonyms, but applying the name to the group represented by the second of the two specimens above mentioned, that is, Cheilanthes myriophylla Desv. Kunze, Linnaea ix. 85 (1835), Hooker, Sp. Fil. ii. 99 (1858), and Mettenius, Cheil. 34 (1859), applied the name correctly and Hooker figured a much more typical specimen than that of Willdenow. Baker, in Mart. Fl. Bras. i. pt. 2, 540 (1870), transferred the name to Notholaena and applied it to an extraordinary collection of species including N. peruviana Desv. (N. Brackenridgei Baker), N. squamosa (Gill.) Lowe and N. brachypus (Kze.) J. Sm.—and this, although two years before in the Synopsis Filicum he had used it correctly and had kept N. squamosa separate and continued this treatment in the second edition of the Synopsis in 1874! Christensen, in the Index Filicum, most unfortunately followed Baker's treatment in the Flora Brasiliensis rather than the better one in the Synopsis and also maintained Cheilanthes scariosa Presl for a plant "certe non Acrostichum [s.] Sw.", although both Presl's and Baker's names were based on Acrostichum scariosum Sw. Finally, Maxon, misled by Baker's placing of the species in Notholaena, redescribed it as Cheilanthes ornatissima.

Pteris aurea Poir. Encycl. v. 710 (1804). Acrostichum bonariense Willd. Sp. Pl. v. 114 (1810). Cheilanthes ferruginea Willd. ex Link, Enum. Pl. Berol. ii. 463 (1822), not Notholaena ferruginea Desv., which is N. trichomanoides (L.) Desv. 1 Notholaena rufa Presl, Rel. Haenk. i. 19 (1825). N. AUREA (Poir.) Desv. Mém. Soc. Linn. Paris vi. 219 (1827). N. ferruginea (Willd.) Hook. Sec. Cent. Ferns sub t. 52 (1861), not N. ferruginea Desv. N. bonariensis (Willd.) C. Chr. Ind.

Fil. 6 (1905), 459 (1906).

This species also has had a rather unfortunate nomenclatural history. It was independently described by Poiret under Pteris, by Willdenow under Acrostichum and by Link, from an herbarium name of Willdenow, under Cheilanthes. Presl added a wholly superfluous new name, Notholaena rufa, citing the two names of Willdenow (whose specimens he had seen) in synonymy with taxonomic, but by no means nomenclatural, correctness, and erroneously adding N. tomentosa and N. ferruginea Desv. Hooker, Sp. Fil. v. 108 (1864) pointed out the last error, but took up his own Notholaena ferruginea, founded on Cheilanthes ferruginea Willd. ex Link and unfortunately retained N. tomentosa Desv. as a synonym. This treatment was repeated in both editions of the Synopsis Filicum. Fournier, Mex. Pl. i. 120 (1872), working at Paris but presumably then not having access to Desvaux's herbarium, confused N. ferruginea Desv. with N. ferruginea (Willd.) Hook, and ascribed the name to the former author while applying it in the sense of the latter. D. C. Eaton, Ferns N. Amer. i. 297 (1879), followed him and subsequent American authors naturally followed Eaton until the publication of the Index Filicum. Hieronymus, on the basis of Hooker's synonymy, took up N. tomentosa Desv. as the earliest name, without mention of Acrostichum bonariense Willd., though this had been correctly cited in the synonymy of the species by Presl and the type was readily accessible at Berlin. Christensen, following Presl's synonymy, took up A. bonariense and transferred it to Notholaena.

¹ This combination is often attributed to Robert Brown, Prod. Fl. Nov. Holland 145 (1810), but, as indicated in the Index Filicum, he there merely stated that Pteris trichomanoides L. belonged in Notholaena and did not definitely make the combination. This was first done by Desvaux, Journ. Bot. Appl. i. 92 (1813).

All this furnishes an instructive example of what may happen to the name of an exceptionally well-marked and clear and, in addition, common and widely distributed species when type specimens are not, or cannot be, examined. No one seems ever to have thought of Poiret's name, though he had himself recorded that his type was in the herbarium of Jussieu, reasonably accessible at Paris at least since 1857, though his description at once suggests to anyone really familiar with the species the identity of his plant, and though Desvaux, who alone had seen the type, had given a plain hint by transferring Poiret's name to *Notholaena* and making no other provision for the well-known species concerned.

Poiret's type, consisting of six detached but perfectly recognizable

fronds, is sheet no. 1333 in the herbarium of Jussieu.

I may add that I have seen the types of all the species here cited. To Mr. Alston of the British Museum, Prof. Dr. Diels of the Botanic Garden and Museum at Berlin, Dr. Klástersky of the National Museum at Praha, and to Dr. Maxon of the United States National Herbarium I am indebted for the privilege of examining specimens under their care and for generous aid in other ways.

6. THE GROUP OF POLYPODIUM POLYPODIOIDES.

By C. A. Weatherby.

An attempt to determine the status and the correct nomenclature of the South American fern treated by Herter as a species under the untenable name *Polypodium minimum* (Bory) Hert. has led me to a study of the whole complex referred to *P. polypodioides* in the Index Filicum.

In 1916 Maxon (Contr. Nat. Herb. xvii. 585), in the course of his very excellent treatment of the American lepidote *Polypodia*, discussed variation in this species, noting that it was often regional and pointing out some significant characters, but concluding that segregation was scarcely justifiable. With one exception, this conclusion holds for segregation as species. However, an examination of the material at Kew (in citation of specimens abbreviated as K), the British Museum (BM), the Muséum d'Histoire Naturelle at Paris (P), the Gray Herbarium (G), and the United States National Herbarium (US) indicates that variation and range so far correspond as to make desirable the recognition of two species and four varieties. The

EXPLANATION OF PLATES.

PLATE I.

- Desmodium Vargasianum B. G. Schubert (Vargas 769), portion of Fig. 1. stem with leaves and raceme showing the type of pubescence on each \times 1.
- Same, flower $\times 1\frac{1}{2}$. Fig. 2. 3. Same, calyx $\times 2\frac{1}{2}$. Fig.

Same, immature loment $\times 1\frac{1}{2}$. Fig. 4.

Same (Killip & Smith 22415), mature loment $\times 2$. Fig. 5.

Lamourouxia dependens Benth. (Skinner), section of flowering Fig. 6. branchlet \times 1.

Same, corolla laid open \times 1. Fig. 7.

- LAMOUROUXIA DEPENDENS, Var. APICULATA Hunnewell & Smith Fig. 8. (Skutch 154), corolla laid open \times 1.
- LAMOUROUXIA MONTANA Hunnewell & Smith (Hunnewell 14856), Fig. 9. apex of flowering branchlet \times 1.

Same corolla laid open $\times 1$. Fig. 10.

Lamourouxia stenoglossa Hunnewell & Smith (Ghiesbreght 706), Fig. 11. apex of flowering branchlet \times 1.

Fig. 12. Same, corolla laid open $\times 1$.

PLATE II.

TILLANDSIA MAXONIANA L. B. Smith (Buchtien 4538), inflorescence Fig. 1. X 1/2.

Fig. 2. Same, apex of leaf $\times \frac{1}{2}$.

Same, expanded sepal × 1. HELICONIA CARDENASII L. B. Smith (Cardenas 2059), leaf and Fig. 3. Fig. 4.

infloresecnce \times 1/5. Same, flower \times 1. Fig. 5.

- Same, diagrammatic section of the base of the perianth to show the Fig. 6. staminode \times 5.
- Heliconia Griggsiana L. B. Smith (Pennell 9085), bract and Fig. 7. axillary flowers $\times \frac{1}{2}$.

Fig. 8. Same, flower \times 1.

Same, unpaired exterior tepal \times 1. Fig. 9.

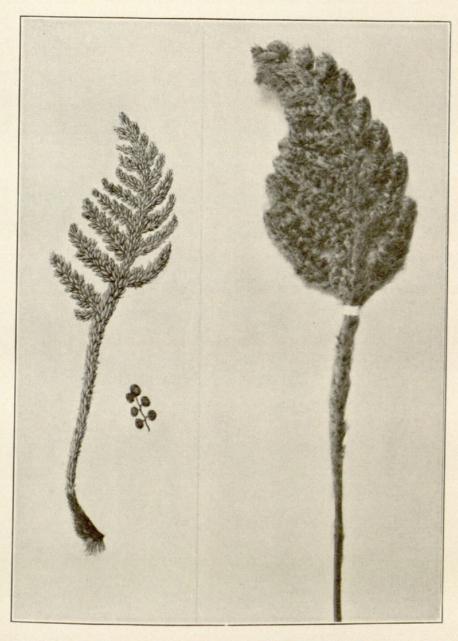
Same, diagrammatic section of the base of the perianth to show the Fig. 10. staminode \times 5.

PLATE III.

AECHMEA SUBPETIOLATA L. B. Smith (Sneidern 1593), habit.

PLATE IV.

Acrostichum lanuginosum Willd. His illustration, left; type specimen, right. The base of the stipe is not shown; it has a conspicuous tuft of scales, as in the drawing.



Acrostichum lanuginosum Willd. His illustration, left; type specimen, right.



Weatherby, Charles Alfred. 1939. "On certain type specimens in ferns." *Contributions from the Gray Herbarium of Harvard University* (124), 13–22. https://doi.org/10.5962/p.336216.

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