# SMITHSONIAN MISCELLANEOUS COLLECTIONS VOLUME 87, NUMBER 1

# THE BOTANICAL COLLECTIONS OF WILLIAM LOBB IN COLOMBIA

# BY

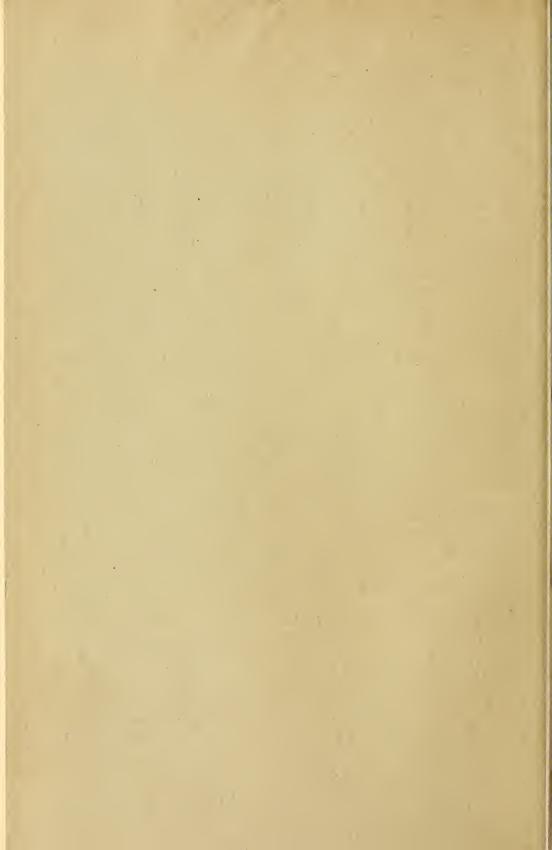
#### ELLSWORTH P. KILLIP

Associate Curator, Division of Plants, U.S. National Museum



(Publication 3133)

CITY OF WASHINGTON
PUBLISHED BY THE SMITHSONIAN INSTITUTION
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# THE BOTANICAL COLLECTIONS OF WILLIAM LOBB IN COLOMBIA

# By ELLSWORTH P. KILLIP,

ASSOCIATE CURATOR, DIVISION OF PLANTS, U. S. NATIONAL MUSEUM

The name of William Lobb is closely associated with botanical exploration in western South America, and there are numerous references in literature to his collections from the Andes. While studying the distribution of certain species of Andean plants, I have found it necessary to examine rather carefully these references, especially those in which the specimens are mentioned merely as "Peru, Lobb," or "Columbia, Lobb." Although these studies have been by no means exhaustive, and positive conclusions are perhaps not yet justified, it seems worth while to present the results of my preliminary investigations.

My interest in the subject was first aroused by observing the unusual distribution of various species of Passifloraceae given in Masters' monograph of the family. There were numerous instances of a species being reported from Colombia solely on the basis of a Lobb collection, all other specimens cited being from Peru or southern Ecuador. More remarkable was the fact that my examination of collections not included in Masters' monograph or made subsequent to its publication showed that in the same instances this additional material came from Peru or southern Ecuador, never from Colombia. Turning to other plant families I found that a similar situation existed.

The question at once presented itself: Did Lobb chance to visit a part of Colombia with a characteristic Peruvian or southern Ecuadorean flora, never before or since explored by botanists, or has there been an error in the labeling of some of his specimens, certain Peruvian and Ecuadorean ones being labeled "Colombia"? The importance of answering this question is obvious: If the "Colombia" specimens actually came from Peru, many species must be eliminated in listing the known plants of Colombia, and conversely, in preparing a flora of Peru, many species hitherto supposed to have been endemic to Colombia must be accounted for. It should be noted that although

<sup>&</sup>lt;sup>1</sup> Mart. Fl. Bras. 13 <sup>1</sup>: 530-654. 1872.

there is a great similarity between the flora of the southeastern Colombian lowlands and that of eastern Ecuador and northeastern Peru, all strictly Amazonian in character, in the mountains a much smaller number of species are common to both Colombia and Peru, and these invariably are to be found throughout the Ecuadorean mountains. The Lobb "Colombia" collections are mainly mountain types.

In investigating this subject I have been greatly assisted by Mr. S. C. Skan, the assistant librarian of the Royal Botanic Gardens, Kew, who has forwarded copies of papers relating to Lobb which are preserved there, and by Dr. H. A. Gleason, Dr. I. M. Johnston, and Mr. A. C. Smith, partly for examining questionable Lobb specimens for me and partly for supplying information about Lobb collections represented in groups they are studying.

# LOBB'S ITINERARY

Definite information concerning Lobb's itinerary in South America is difficult to obtain. William Lobb was for many years (1840-1857) a collector for the well-known horticultural firm of James Veitch and Sons, of London. In 1906 the firm published the "Hortus Veitchii," a work containing biographical sketches of the numerous collectors sent out by the firm, as well as lists of the more important plants collected and introduced into European horticulture through their efforts. Of William Lobb it is stated: \*\*

... he gladly accepted a proposal ... to go on a mission to various parts of South America for the purpose of collecting plants, and he sailed from Plymouth in 1840 for Rio Janeiro. On his arrival in Brazil he first proceeded to the Orgáos Mountains, ... he then left for Chile, crossing the great pampas of the Argentine Republic and the Chilean Andes. Continuing southwards, Lobb penetrated the great Araucaria forests . . .

He returned to England in 1844, renewed his engagement, and sailed again for Brazil in April of the following year.

After sending home from Rio Janeiro a consignment of plants collected in Southern Brazil, he proceeded to Valparaiso for the purpose of exploring Southern Chile . . . .

Following up these brilliant achievements, he continued explorations in Valdivia, Chiloe, and Northern Patagonia . . . Lobb returned to England in 1848.

<sup>&</sup>lt;sup>2</sup> Pp. 37-40. This account of William Lobb is taken from Veitch's Manual of Coniferae, compiled by Adolphus Kent. No additional information bearing on Lobb's route is given in the earlier work.

<sup>&</sup>lt;sup>8</sup> Pp. 37 sq.

The remainder of this account deals with Lobb's travels in the western United States between 1849 and the time of his death in San Francisco in 1857.

It will be seen that no mention is made here of his travels in the Andes north of Chile. From statements in the accounts of the plants received by the Veitch firm from Lobb from Peru and northward in the Andes, as well as from references to Lobb's collections in Curtis's Botanical Magazine and similar publications, it appears that this part of Lobb's explorations was made between 1842 and 1843.

No letters written by Lobb while in South America are extant apparently. The firm of James Veitch and Sons having been discontinued, Mr. Skan kindly sought information from a former employee of the firm, who replied,

Apparently Lobb's letters were available when Adolphus Kent compiled Veitch's Manual of Coniferae, but they were not with the firm in my time. The only letters relating to Lobb which I saw were copies of the letters sent by the firm to Lobb. These were in a private letter book and were no doubt destroyed when the firm was wound up.

In Lobb's time letters were few and far between and I have always understood that the Lobbs said and wrote little about either their finds or their travels.

Two letters in the Kew Library bear upon Lobb's travels:

Ed. Michel to W. Jameson. Guayaquil, Nov. 15, 1843.

Mr. Lobb arrived here from Panama on the 28th ult. and embarked same day on board of the steamer Peru for Callao.—7 boxes of plants to which Mr. Veitch refers were left by Mr. Lobb at the English Consul House at Puna [a settlement on an island in Guayaquil Bayl and were never forwarded to Panama. Mr. Lobb wrote from Guayaquil to Mr. Veitch explaining the occurrence and his letter will no doubt be a satisfactory reply to all Mr. V. inquiries. The boxes Mr. Lobb left on his first arrival in this country and on examination when he was last here he found, I believe, that the plants were in an unfit state to be sent forward and they were thrown away as useless.

Seeman's letter of July 28, 1847, from Paita.

Mr. Lobb speaks to me of Loxa and Cuenca in most extravagant terms—of all the parts of the interior he has visited he considers them the most beautiful and calls them the "Garden of South America."

Lobb probably made herbarium specimens of most of the plants represented in the material sent to Europe for horticultural purposes, though apparently some of them were lost. He does not appear to have made more than a single specimen of each, and these are deposited at Kew, the inscriptions on the sheets invariably being "Columbia, Lobb," "Peru, Lobb," and the like.

<sup>4</sup> Hooker Corresp. vol. 19: no. 219, at Kew.

The most helpful clues to Lobb's Andean itineraries are to be found in the list of plants introduced into horticulture through Lobb, given in the Hortus Veitchii, and in a manuscript "List of Dried Specimens from William Lobb from South America, July 1843," which is preserved in the Kew Library.

In the Veitch list of plants obtained by their collectors, there are numerous references to the collections of William Lobb, mainly to those obtained in Brazil, Argentina, Chile, and Peru, and there is little reason to question the correctness of the data as to the place of origin of his material from those countries. Three Ecuadorean plants of Lobb's are mentioned, Calceolaria crenata, from Quito, and Macleania punctata, and Tacsonia mollissima, all of which are known to occur in that country. Of the four "Colombian" plants of Lobb's given in this account, Fuchsia macrantha most probably came from Peru, not Colombia (see page 10), and Tropacolum lobbianum from southern Ecuador; Tropacolum smithii may have come from Colombia; Heterotrichum macrodon is otherwise known only from Venezuela, and the identity of the Lobb plant and its place of origin are uncertain at present.

In the "List of Dried Specimens" there are recorded 117 plants; to each a number is given and with each is associated a brief note as to the character of the plant, the color of the flowers, and locality data. For 31 of these, various localities in southwestern Colombia are given. A transcript of a part of the data for the Colombian entries follows:

20.	Tropaeolum	Pro. Pasto New Granad.	9000 ft.
	Befaria grandiflora	Pro. Pasto New Granada	9000 ft.
-	Calceolaria	Near Guachucal	5000 ft.
-	Besleria	Pasto New Granada	7000 ft.
81.	Thibaudia	Pasto New Granada	6000 ft.
82.	22	near Barbacosa	
83.	"	do do	
	Besleria	near Pilispi P. Pasto	4000 ft.
86.	Plant	Pro. Pasto	6000 ft.
87.	Fuchsia	do do	7000 ft.
88.	Plant Herb	Near Pilispi do	5000 ft.
89.	Shrub	do do do	5000 ft.
90.	Shrub	do do do	5000 ft.
91.	Plant procumbent	n. Barbacosa	,,,,,,,
92,	Plant	n. Barbacosa, Pr. Popayan	
93.	Gloxinia	do do do	
		near Barbacosa	
	Atropa	Near Guachucal Pr. Pasto	7000 ft.
	Gesneria	near Pilispi	5000 ft.
	Plant Prostrate	near Barbacosa P. Popayan	
-		1 2	

175. Plant	near Barbacosa			
176. Siphocampylus	Prov. Pasto			
179. Utricularia	Near Barbacosa			
180. Herb	do do			
181. do	do do			
182. Aquatic	Laguna (illegible) Pr. Popayan			
183. Aquatic	do " do			
Orchideae				
o.1 Epidendron	Molletura, P. Popayan Equator	6000 ft.		
2. do	Pilispi P. Pasto	6000 ft.		
11. Oncidium	P. Pasto	8000 ft.		
12. "	near Pilispi	5000 ft.		

Presumably these specimens are in the Kew herbarium, but unfortunately I have had no opportunity of examining them and ascertaining whether they represent characteristic Colombian species or Peruvian ones not otherwise known to occur in Colombia. However, from Mr. Smith's examination of the Thibaudieae, it appears that all of these may well have come from southern Colombia; certainly there is no indication of a Peruvian origin.

The localities on this list are mainly in the extreme southwestern part of Colombia, and are all in the present Department of Nariño, formed from portions of the earlier provinces of Popayán and Pasto. Barbacosa is doubtless the city of Barbacoas, on the Patía River near the coast, at an elevation of about 100 feet. Pasto, the capital of Nariño, is situated in the mountains on the main route of travel from Quito to Popayán. Guachucal is a town about 50 miles southwest of Pasto, and is one of the localities at which Humboldt collected. Pilispi I have not been able to find on any map or in any gazetteer of Colombia, Ecuador, or Peru. The insertion of the words "P. Popayán" in the first orchid entry is clearly a clerical error, as elsewhere on the list "Molletura, Prov. Cuenca," [Ecuador] appears.

From this it seems evident that Lobb did visit the southwestern part of Colombia, perhaps by going overland from Quito to Pasto, descending to Barbacoas, and boarding a ship at the port of Tumaco, or perhaps by stopping off at Tumaco and making a hurried trip to Pasto and return. I am confident that the plants he collected will all prove to be characteristic Colombian or northern Ecuadorean species, most of them probably represented in the subsequent collections of André and Lehmann, and that one need not expect to find in this region the characteristic Peruvian, or even southern Ecuadorean, species, as botanical literature would indicate.

The political division of northwestern South America during the past century may be briefly noted here. From 1810 to 1831 the pres-

ent Venezuela, Colombia, and Ecuador were united in one political unit, the Republic of Colombia; in 1831 these countries became separate republics under the names Venezuela, Nueva Granada, and Ecuador. The name Nueva Granada was changed in 1861 to that of the United States of Colombia, and in 1886 to the Republic of Colombia. The boundaries between the three countries, either as entities or as parts of the early Republic of Colombia, have been substantially the same as they are today. The name Colombia has never been properly applied to Peru. In Lobb's time the three countries, Venezuela, Nueva Granada, and Ecuador, were distinct, and it is doubtful if Lobb ever used the term "Colombia," even for his New Granada collections. However, there is every indication that botanical students, of the present day as well as a hundred years ago, working far from the field, have had a very hazy idea of the political divisions and the geography of South America, and have used the names of the countries with much laxity. Doubtless those who first examined the Lobb mounted specimens wrote on the sheets indiscriminately "Peru" or "Columbia."

## CITATIONS IN LITERATURE

As a collector of plants for horticultural purposes, Lobb gave special attention to such groups as *Passiflora*, *Fuchsia*, *Tropaeolum*, *Bomarea*, and *Thibaudieae*, and it is in these groups that we find the greatest number of Lobb collections cited. The following list contains all citations of Lobb's specimens, including those in the lists mentioned above, that bear upon the questionable Colombian collections, which so far have come to my attention.

# **AMARYLLIDACEAE**

Baker, Handbook Amaryllideae 1888

EUCHARIS GRANDIFLORA Planch.

Page 110. "Andes of New Granada, Lobb! Jameson! Lehmann! André! Introduced into cultivation in 1854 through M. Linden."

Based originally upon a plant from the Chocó, in northwestern Colombia, the species ranges south through Ecuador to northern Peru. Jameson collected only in Ecuador, Lehmann and André in both Ecuador and Colombia. Most of the material in the National Herbarium is from Ecuador. The Lobb specimens therefore may have come from either Colombia or Ecuador.

Bomarea Phyllostachya Mast.

Page 144. "Andes of Columbia, Lobb!"

The species of *Bomarea* to which this is most closely related range from Colombia to Peru. Kränzlin has described <sup>8</sup> a plant *B. stricta*, based upon a Lobb specimen from *Peru*, which differs from *B. phyllostachya* only in slightly smaller leaves and flowers. I strongly suspect that the type of *B. phyllostachya* came from Peru, and may even be a part of the same collection upon which *B. stricta* is based.

Bomarea Glomerata Herb.

Page 148. "Andes of Columbia and Peru, Mathews 1662! Lobb 256!"

As Mathews collected only in Peru, the "Columbia" reference must have been to the Lobb plant. I can not separate B. glomerata from the common Peruvian plant B. setacea R. & P., which is not known to occur in Colombia. In all probability Lobb's 256 is from Peru.

Bomarea formosissima (R. & P.) Herb.

Page 153. "Andes of Peru, *Pavon!* . . . . Columbian specimens from Lobb and Bolivian from Pearce agree substantially with Pavon's."

This is the only Colombian record for one of the most showy of Peruvian Bomareas. The Hartweg plant, from the vicinity of Bogotá cited by Bentham as *B. formosissima* has been shown by Baker to be a distinct species, to which he gave the name *B. herbertiana*.

Bomarea pardina Herb.

Page 158. "Andes of New Granada and Ecuador, gathered recently by Lobb, Spruce, Pearce, and André."

Spruce and Pearce did not collect in Colombia, but both made large Ecuadorean collections. André's plant came from Ecuador. Doubtless the Lobb plant was obtained in southern Ecuador.

# TROPAEOLACEAE

TROPAEOLUM LOBBIANUM Veitch

Hooker states,<sup>†</sup> "It was detected by a Veitch collector, Mr. Lobb, in Columbia, and sent home in the early part of 1843."

<sup>&</sup>lt;sup>5</sup> Ann. Nat. Hofm. Wien 27: 156. 1913.

<sup>6</sup> Pl. Hartw. 259. 1846.

<sup>&</sup>lt;sup>7</sup> Bot. Mag. Curtis 70: pl. 4097. 1844.

As Buchenau has shown, this is the same as *T. peltophorum* Benth., described from Ecuador a year earlier. All material of this species which I have seen comes from Ecuador. This and the following species are both listed in the Hortus Veitchii (page 438).

# TROPAEOLUM SMITHII DC.

The entry in the Hortus Veitchii gives Colombia for this collection of Lobb's. The species ranges from Venezuela to Ecuador, so the Lobb plant may have come from either Colombia or Ecuador.

There are nine entries of *Tropacolum* in the "List of Dried Specimens," of which eight are associated with places in Ecuador and one is from Colombia.

## PASSIFLORACEAE

Masters in Mart. Fl. Bras. 131: 530-627. 1872.

Passiflora trifoliata Cav. (Tacsonia trifoliata Juss.)

Page 538. "Habitat in Peruvia: Ruiz et Pavon! Gay! Mathews n. 674! 675! Cruikshanks! MacLean!; et in Columbia: Lobb n. 20!"

This is a common species of the high mountains of central Peru, and Lobb's collection was almost certainly made there.

Passiflora ampullacea (Mast.) Harms. (Tacsonia ampullacea Mast.)

Page 539. "Habitat in Ecuador prope Cuenca: Jameson!; in Nova Granada: Lobb!"

The Lobb specimen is a perfect match for the Jameson plant as well as for Lehmann's 4602, the type of *Passiflora hieronymi* Harms, from the western Andes of Cuenca. The latter species must be reduced to synonymy. The Lobb plant doubtless came from the vicinity of Cuenca where he made large collections.

Passiflora urceolata (Mast.) Killip (*Tacsonia urceolata Mast.*)
Page 539. "Habitat in Colombia: Lobb n. 121!"

This species is known only from the single type specimen, so that conclusions as to the precise locality are difficult to draw. Inasmuch as its nearest relatives, *P. ampullacca* and *P. matthcwsii* are from southern Ecuador and northern Peru, respectively, it is probable that it, too, came from that general region.

<sup>8</sup> Pflanzenreich IV 131: 21. 1902.

Passiflora parvifolia (DC.) Harms (Tacsonia parvifolia DC.)

Page 540. "Habitat in Columbia: Lobb!; in Peruvia: Ruiz et Pavon!; in Ecuador: Pearce."

This plant has been found in Peru by recent collectors, but never in Colombia or Ecuador. There are two sheets in Kew herbarium, one labeled "Lobb, Peruvia," the other "Lobb, Columbia." There is every indication that these specimens were collected at the same time and even from the same plant, the degree of development of the flowers and the discoloration of the specimens being very similar. The Pearce plant from Ecuador (no. 35) was wrongly identified as *P. parvifolia* by Masters; it proves to be *P. cumbalensis* (Karst.) Harms.

Passiflora mollissima (H. B. K.) Bailey (Tacsonia mollissima H. B. K.)

Page 541. Under *Tacsonia mollissima* var. *glabrescens* Masters cites two collections, "In Ecuador ad Cuenca: Seemann 823!; in Columbia: Lobb!"

Passiflora mollissima is widely distributed in the Andes from Venezuela to Peru, the form with glabrescent upper leaf surfaces being found throughout the range. No conclusions regarding the origin of the Lobb specimen are therefore possible.

Passiflora Lobbii Mast.

Page 533. "Habitat in Columbia: Lobb!"

This plant has been collected in recent years in central Peru by Weberbauer, Killip and Smith, and Macbride, but never in Colombia. A Weberbauer specimen has been made the type of *P. obtusiloba* var. *glandulifera* Harms.\* Although *P. lobbii* and *P. obtusiloba* have a similar general appearance, the two are separated on several characters other than the presence or absence of petiolar glands. I am convinced that both species are restricted to central Peru.

Passiflora sanguinolenta Mast.

Page 559. "Habitat in Columbia: Wallis!; in Peruvia (?): Lobb 151!"

All other collections of the species are from southern Ecuador, where these two perhaps also were collected. On the Lobb sheet is inscribed "Peru," and this is the only instance I have yet discovered of a Lobb specimen apparently being mislabeled "Peru."

<sup>&</sup>lt;sup>9</sup> Repert. Sp. Nov. Fedde 19:25. 1923.

## LOASACEAE

CAJOPHORA CYMBIFERA Urb. & Gilg.

Urb. & Gilg, Monographia Loasacearum 281, 1900. "Habitat in Columbia: Lobb," this collection being the type and only one of the species known.

Of the 57 species of Cajophora treated by Urban and Gilg, this is the only one recorded from Colombia, and only one other, C. aequatoriana, is known to occur north of the Peru-Ecuador boundary. The Lobb plant is probably from central Peru. Under C. aequatoriana the authors observe that a depauperate specimen in the Kew herbarium, said to have been collected by Lobb "in Columbia," perhaps is referable to that species. Cajophora aequatoriana ranges from Quito, Ecuador, to northern Peru, and the Lobb plant in question may well have come from southern Ecuador.

# **MELASTOMACEAE**

HETEROTRICHUM MACRODON Planch.

In Hortus Veitchii (page 264) and Curtis's Botanical Magazine this is said to have been raised in England from seed sent by William Lobb from New Granada. The species is known otherwise only from northern Venezuela. Pending examination of the Lobb specimen, it is impossible to suggest an explanation for this apparently unusual distribution.

## **ONAGRACEAE**

FUCHSIA MACRANTHA HOOK.

In proposing <sup>10</sup> this species Hooker says, "It . . . . is an undescribed species, first, however, found by Mr. Mathews climbing on trees in lofty mountains at Andimarca, Peru, . . . and next by Mr. Veitch's collector, Mr. William Lobb, detected in woods near Chasula, Columbia, at an elevation of 5,000 feet above the sea." This is also one of the Lobb Colombian plants listed in the Hortus Veitchii (page 264).

All the material of this species in the National Herbarium is from Peru, and I have been unable to find any other record for Colombia. "Chasula" does not appear in Colombian gazetteers, but there is a town Chasuta, not far from Andamarca, in the mountains of north-central Peru, and another town Chagula in central Peru, and it is not unreasonable to suppose that this plant may have come from one of these places.

<sup>10</sup> Bot. Mag. Curtis 72: pl. 4233. 1846.

# VACCINIACEAE—THIBAUDIEAE

(Information supplied by A. C. Smith, New York Botanical Garden, based upon a monographic treatment of the tribe, in press, and an examination of specimens in the Kew herbarium.)

CERATOSTEMA BUXIFOLIUM Field. & Gardn.

"Lobb 2, Columbia" on specimen.

This is probably the type of *Thibaudia microphylla* Lindl., which is a synonym of *Ceratostema buxifolium*. This specimen certainly is from Peru.

CERATOSTEMA GRANDIFLORUM R. & P.

"Lobb 3, Columbia" on specimen.

All other specimens belonging to this species are Peruvian.

CERATOSTEMA sp.

"Lobb 252, Columbia" on specimen.

This represents an undescribed species which Mr. Smith has in manuscript. All other Ceratostemas of this affinity are from Peru, and doubtless this is also.

ENGLERODONA ALATA Hoer.

Lobb 80, 161.

One of these sheets is labeled "Columbia." All other material of this species is from Ecuador. In the "List of Dried Specimens" the entry for no. 80 reads, "Thibaudia, shrub 3 to 4 ft., high mountains, Pro. Cuenca Ecuador."

THIBAUDIA MELLIFLORA R. & P.

There is in the Kew herbarium a sheet labeled "Columbia, Lobb," which has been identified as *Thibaudia melliflora* R. & P., a species otherwise known only from central Peru, the type specimen probably from the Department of Huánuco.

MACLEANIA MACRANTHA Benth.

"Lobb 82, woods, Barbasopa, Columbia" on specimen.

This number is included in the "List of Dried Specimens." As already pointed out, the locality probably is Barbacoas, Colombia. This species was originally described from the Pichincha region of northern Ecuador, and the Lobb specimen may well have been collected in southern Colombia.

PSAMMISIA Sp.

"Lobb 89, near Pilispi, 5,000 ft., New Granada."

This also represents a new unpublished species of Mr. Smith's, and no other material is referable to it. The locality is probably in southern Colombia or northern Ecuador.

CAVENDISHIA, indeterminable

"Lobb 83, Columbia" on specimen. Mr. Smith states that although the material is too incomplete for identification, it resembles species from southern Colombia, and probably is from that region.

"Thibaudiae"

"Lobb 79, woods Rosario, 5,000 ft., Columbia."

This is the type of a species in an unpublished genus of Mr. Smith's. In the "List of Dried Specimens" the locality for this number is given as "Woods Rosario, Pro. Cuenca Ecuador, 5,000 ft." and the two other references to this place on the list are also associated with the Province of Cuenca. This is direct evidence of "Columbia" having been written on a sheet bearing an Ecuadorean collection.

# BORAGINACEAE

CORDIA CURASSAVICA (Jacq.) R. & S.

"Lobb 50, Columbia" written on specimen.

This is the only Lobb specimen in material of *Cordia* from western South America sent me by Kew for examination. It is certainly *C. curassavica*, a Caribbean species common along the north coast of South America, extending south in Colombia only a comparatively short distance up the Magdalena Valley, and wholly unknown from the mountains of southwestern Colombia, Ecuador, and Peru. If the specimen actually was collected by Lobb, he doubtless obtained it at some northern Colombian port while traveling between Panama and England.

HELIOTROPIUM INCANUM R. & P.

"Lobb 97, Columbia" written on sheet.

Otherwise this species is known only from central and southern Peru, where it is common. In his paper on the South American species of *Heliotropium* Johnston cites <sup>11</sup> this specimen under the general heading Peru.

<sup>&</sup>lt;sup>11</sup> Contr. Gray Herb. 81:41. 1928.

### COMPOSITAE

EUPATORIUM DIPLODICTYON Robinson

"Lobb, Columbia" written on sheet.

This is the type of the species, and has never since been discovered in Colombia, though J. F. Macbride recently collected the plant near Muña, in central Peru (no. 4296). Doctor Robinson has briefly discussed <sup>12</sup> these dubious "Colombia" collections of Lobb's.

#### CONCLUSIONS

The material here presented covers doubtless only a small fraction of the Lobb Colombian specimens cited in literature and a smaller fraction of those in the Kew herbarium, but the following conclusions apparently may safely be drawn:

1. That Lobb made a collection, probably a small one, in the present Department of Nariño, in southwestern Colombia, and that these specimens represented characteristic species of that region.

2. That he collected a few plants at a northern port of Colombia probably Cartagena or Santa Marta.

3. That he made large collections in southern Ecuador and smaller collections in central and northern Ecuador, and that a great majority of these sheets are labeled erroneously "Columbia," a few, perhaps, "Peru."

4. That he collected extensively in the mountains of central Peru, many of these sheets being labeled "Columbia."

5. That botanists should view with suspicion all "Lobb, Columbia" citations in literature or inscriptions on herbarium sheets, and should hesitate before ascribing any extraordinary range of distribution to a species solely on the basis of these "Lobb, Columbia" specimens.

<sup>&</sup>lt;sup>12</sup> Contr. Gray Herb. **77**: 14. 1926.