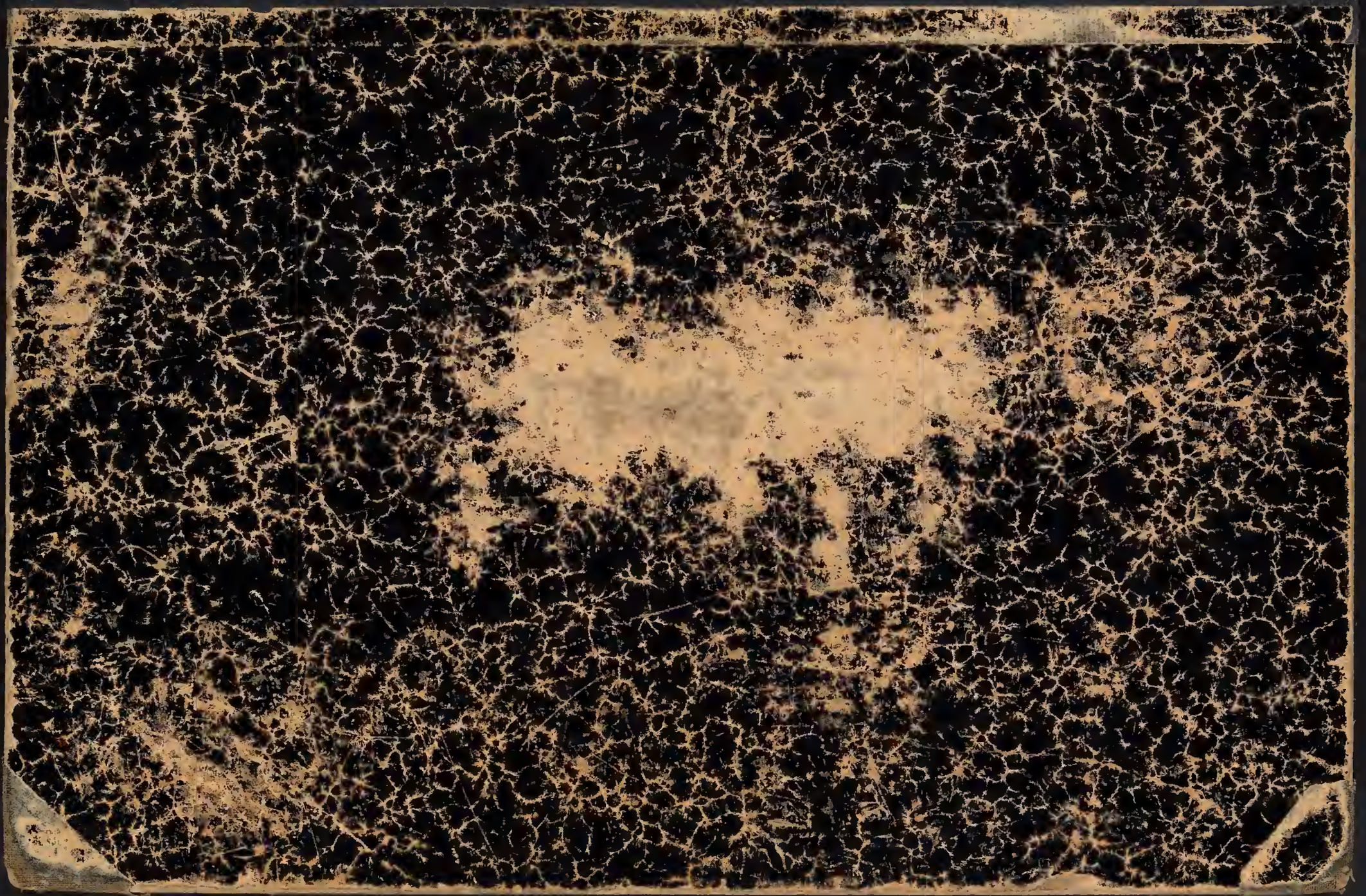


Field Notes of Charles Wright

for

1849 and 1851-52

relating to

collections from Texas, New Mexico, Arizona,

and adjacent Sonora and Chihuahua.

A copy with commentary

by

Ivan M. Johnston

February, 1940.

Introduction

For a readable and useful account of Wright's life and of his botanical activities in Texas see account by S. W. Geiser, Naturalists of the Frontier 214-252, and 314 (1937). Wooton, Bull. Torr. Cl. 33: 12-17 (1886), studied Wright's field-lists and published a chronological list of the localities mentioned in them. Standley, Contr. U.S.Nat. Herb.13:143-246 (1910), has some notes on Wright's itinerary in New Mexico and a list of new species he collected there. The notes on localities given by Wooton and by Standley, however, are not critical and some are incorrect. Additional data on Wright's collection may be found in the two published parts of Gray's Plantae Wrightianae.

With this transcript of Wright's field-notes I have given a running commentary concerning the precise location of places he visited. These notes are based, not only on the list itself, but on a consideration of contemporary documents, as well. The route has been followed on every large-scaled modern map available.

Much of Wright's collecting was done along the wagon road between San Antonio and El Paso. Practically all of his collection of 1849 was obtained along the road. Large parts of the first and third lots of his collection of 1851-52 were obtained along it also. He was not always consistent as to the names of the localities at which he collected during his three traverses of this route. The detailed discussion of localities along the San Antonio - El Paso road I have given with his collections of 1849. Reference to this full discussion will befound in my notes regarding Wright's later collections from along the route.

Ivan M. Johnston
7.6.1940.

Wright's Field Lists

The following plant-lists are copied with some modifications of wording from manuscript lists sent to Gray by the collector. The numbers given are field-numbers assigned the collections by Wright. These numbers were disregarded by Gray when he made up Wright's plants into sets. The numbers on the labels of Wright specimens in herbaria belong to a new series assigned them by Gray, the set of distribution-numbers. Not only did Gray ignore Wright's field-numbers but he also frequently united and distributed under a single distribution-number, two or even more of the collections which Wright had collected under different field-numbers, frequently at distant stations, and at different seasons. If Gray thought two or more of Wright's collections represented the same species and if there was any advantage in uniting them, he did so regularly without scruples.

Many of the plants distributed by Gray can not be definitely associated with any of the numbers given in Wright's field-lists. Since Wright had a good knowledge of genera and families of Texan plants, his field identification and the geographical data given by Gray in the Plantae Wrightianae help one to make a reasonably good guess as to the precise identity of many collections. In the Gray Herbarium it is common to find, obscurely pencilled in the corner of the familar blue label of the Wright collection, numbers which refer to the field-lists treated here. In the pocket of other collections frequently found there is a small bit of paper bearing Wrights original field-number, in the script of the collector, probably representing the tag which Wright placed with each collection as he assembled them in the field, Following the sequence of Bentham & Hooker, Gray treated in the Plantae Wrightianae, I & II, the Dicot. families up to and including the Compositae. Gray appears to have considered that he had extracted all of value from the field-list for those collections treated in the Plantae Wrightianae, and as a general rule made little or no effort to

1847 with army to Rio Grande at Eagle Pass
July — Sept (most collection Aug-Sept)
San Antonio to near present-day Uvalde and then
cross-country SW to Eagle Pass and back in
San Antonio late September 1848. No listing of
these collections known.

effort to preserve Wright's field-ticket, or to note the proper field-number on the herbarium-label of these collections, It is on the specimens belonging to the families not treated in either of the two volumes of the Plantae Wrightianae that Gray usually saved the field-tag or hastily pencilled (sometimes incorrectly) the field-numbers refering to the present list.

It will be noted that the field-list consists of four gamuts of numbers, 1849, 1-1404; 1851, 1-579; 1852, 1-952; & 1852, 1-588. Gray had two different herbarium-labels, one for the collection of 1849 , the other for the collections of 1851-52. Field-numbers found associated with the collections of 1849 are easily located in the list for 1849. The field-numbers for 1851-52 must be sought in Wright's three lists for that period. The collections for 1849 were distributed in 1850, and though representing 1404 numbers in Wright's list, were in Gray's distribution accomodated by numbers 1-828 (see transcript of Gray's letter of May, 30, 1850). Gray apparently sorted and arranged Wrights collections in systematic order (following Bentham & Hooker) and numbered them in systematic sequence. Those plants representing the sequence of families Ranunculaceae-Compositae, and belonging to the first two lots of Wright's collections of 1851-52 (collected betw. S.Antonio and ElPaso, and west in New Mexico and Arizona), usually bear numbers in the gamut, 830-1300. The remaining plants of the total 1851-52 collection, representing families beyond the Compositae, as well as the Ranunc.-Compositae of the third lot of this collection, apparently always bear numbers above 1300.

The extent to which Gray united collections is well shown by his treatment of the collections of 1849. In that year Wright made 1404 separate collections. These, supplemented by some of Wright's earlier collections (made about Eagle Pass in 1848) , made only 828 collections when distributed by Gray. This of course does not take into account the unicates, which Gray retained and did not number, but, even so, it indicates that about half of the specimens Gray distributed must

be ~~a~~ mixtures of two or more collections, made at different places and at different times by Wright. The great number of cases to be found in the Plantae Wrightianae in which Gray cites only a single number, yet mentions two or more localities, gives further evidence of his practice of distributing a deliberate mixture of two or more of Wright's collections under a single distribution-number.

There is a valuable "barometric profile" of the San Antonio – El Paso road with distances, localities, altitudes etc. in Graham's report.

Wright's collections of 1849

During the spring of 1849 a route had been discovered which was practicable for a new southern wagon-road between San Antonio and El Paso. A government party of soldiers and road-builders left San Antonio the first of June, 1849, to put this road into commission. Wright accompanied this party but had no official connection. His botanizing was ~~carried out~~ carried on under discouraging conditions. The official report of the expedition, by Capt. S.G. French, pp. 40-54, and others, is found in Senate Executive Documents, 1st Sess., 31st Congress, vol. 14, no. 64 (1850). There is a copy of this report in the Arboretum Library. This report gives a map, milages, and descriptive details of the area in which Wright botanized as the road was slowly pushed through to El Paso. The party arrived in El Paso about the 10th of September, and after remaining there nearly a month, returned via the Guadalupe Mts, the Pecos, and Devils River, to San Antonio. An interesting account of Wright's work during this expedition, with itinerary, and personal details has been given by S.W. Geiser, Field & Lab. 4: 23-32 (1935). There are a few mistakes in details in this article., but no important ones.

All the plants collected in 1849 were obtained within the state of Texas, with the possible exception of a few that might have come from just over the New Mexican line in the vicinity of the Guadalupe Mountains.

The collection was received by Gray in Feb. 1850.

Regarding Gray's distribution of Wright's collections of 1849.
(data from Gray's letters to Wright)

In letter of Jan 2, '50, Gray acknowledges receipt of catalogue, and in Feb.10, '50 the receipt of the collection (8 bundles & 2 boxes)

In Gray's letter of May 30, '50 he gives the following data regarding the sets, - "In the distributiom of your sets the highest number is 828. This runs through my set, Lowell's, and the Smithsonian's. Then Bentham's (which I pay for) is 680, Harvey's 690, Hooker's 650, Fielding's 644, B.L.Greene's 631 (as he advanced $50 that leaves only $13 coming from him), British Museum 519, Webb 453 (these two last are not engaged but I hope they will take them; I shall carry them abroad for the purpose). A set I have offered to Durand contains 498. As he bought a former Texan collection from you which contains many of the same things and has also Lindheimer's, I have written to him offering this set for $40, should he decline I shall try to dispose of it abroad for $50 but there will be some expenses. In the distribution I have used those collected between Galveston and San Antonio where they held out well, also I have used the Rio Grande plants [i.e. the Eagle Pass collection of 1848] and others of the old collection. Here after do not send those collected in Texas or any formerly collected, as they deterioriate your sets. Every one of our subscribers have them from Drummond and Lindheimer before. It was not well thought of to send that Texan bundle, as they are of no use, except that I have used a few to eke out other sets. For the rest, Torrey's set is 433 specimens; when the specimens run short his are always scraps (those go against his paper etc.). To Engelmann I have sent a number of supernumeraries and plants which I want him to study. DeCandolle's set ammounts to 410 specimens. These I have offered to him as you proposed in exchange for the Prodromus. I shall bundle up the other Texan plants remaining here and send ~~?????~~ to DeCandolle with them. I have not time to total their number now but must do that at intervals of leasure while I am at Geneva this summer. The above enumeration takes all your collections. Supernumeraries of interesting plants are thrown into my set from which specimens can be taken here after for yourself.

If Durand, Webb, and the British Museum take the sets saved for them they will all be off your hands at once. I sent by private hands some of the earlier numbers of the set to Bentham and have got the returns of the Leguminosae, which I asked him to elaborate; they have much novelty and interest." All the mosses were sent to Sullivant and all lichens to Tuckerman

Note: Wright's catalogue for 1849 contained 1404 numbers. This large collection, plus some of Wright's earlier collections added to it, was made up into sets the most complete of which only contained 828 numbers. In other words Gray united collections of a species, from 2 or more localities, and issued them under a single distribution-number. Wright apparently received ten cents a specimen.

There is a copy of Bartlett's Narrative at the Arboretum & a copy of Graham's Report ("TNA-G") at the Mus. Comp. Zoology.

Charles Wright's collections of 1851-52

The collections of this period were made when Wright was associated with the Mexican Boundary Commission. He joined the party of Col. J.D. Graham at San Antonio in May 1851 and travelled to El Paso on the southern wagon-road. He reached El Paso the end of June, 1851, having collected 579 numbers, along the same route he had explored, between June 1st and Sept. 12th, 1849. This first lot of plants was shipped to Gray soon after his arrival in El Paso. Gray received it Dec.4, 1851. After collecting about El Paso for several weeks, Wright accompanied Graham, who had to report to Commissioner Bartlett, on a journey to Santa Rita (the Coppermines), New Mexico. The party remained at Santa Rita until late in August, 1851, when Graham's party (with Wright, as "Botanist and Assistant Computer") and Bartlett's party (with Thurber) travelled west for a meeting with the Mexican Commissioner Gen. Garcia-Conde. This turned out to be a series of misadventures. The meeting took place much farther west than expected, provisions ran short, and Bartlett, with Graham following, got beautifully lost in the Huachucas trying to find the road to Santa Cruz, Sonora, for new provisions. Wright, who was along, however, did have the chance to do some fine botanizing. The trip from Santa Rita to Santa Cruz is described, day by day, in John R. Bartlett's, Personal Narrative (1854-56), and in Graham's report, Exec, Doc. Senate, 1st sess., 32nd Cong. vol.15, no. 121 (1852). The party returned to Santa Rita early in October, 1851, and was back in El Paso the first week in November. Bartlett and Graham having failed to accomplish anything, the latter was recalled to Washington in October 1851. He left El Paso in November taking with him the second lot of Wrights plants (952 numbers). Graham delivered them to Gray June 4, 1852. Wright was next under Major Emory, who replaced Graham, and was put to work surveying with partial time for botanizing. The collections in the third lot of Wright's collection date from Feb-July 1852, Many of these are from the vicinity of El Paso,

(over)

nearly a hundred are from the Organ Mts. and adjacent Ft. Fillmore north of El Paso, and about fifty from northern Chihuahua south and southwest of El Paso. The Boundary Survey having gone bankrupt under the flighty Bartlett, Wright left El Paso the middle of June, 1852, and returned via the southern wagon-road to San Antonio, arriving there a month later. Almost a half of Wright's third lot of plants was collected along the El Paso - San Antonio road. Emory claimed this third lot of the Wright collections and it was not placed in Gray's hands until Sept. 1852.

The region collected by Wright in 1851-52 after he reached El Paso is well described by Bartlett's in his lengthy "Narrative". While Wright accompanied Bartlett only on the trip from Santa Rita to Santa Cruz, Bartlett, having apparently considered his appointment of Commissioner as an invitation to gad about the country, managed to visit at one time or another most of the localities botanized by Wright. Bartlett's Narrative is most helpful in determining the nature and conditions of the country visited by Wright. Graham's report is useful only for the data on the Santa Rita to Santa Cruz trip, and even it is less detailed than Bartlett's.

Excerpts from Gray's letters regarding 1851-52 collection and the Plantae Wrightianae

In Gray's letter to Wright, dated June 5, 1852, he announces that he has just received the second lot of the 1851-52 collections, delivered by Graham, and has received the plant-list by mail (from Wright). He continues,- "I think I shall distribute thus, 1) a full set saved up for yourself, 2) Dr. Short, 3) Dr. Torrey (selection, what he will need), 4) Mr. Lowell (especially those he has not before), 5) Hooker, 6) Mr. Boissier (who had none before and will pay well), 7) Engelmann (especially his favorite families), 8) Mr. Carey (if he will subscribe and pay), 9) Bentham (I shall take some for him), 10) some one of the foreign subscribers, 11) etc. " A set also went to the Government according to agreement with Col. Graham. Gray also wrote,"I shall somehow distribute your 1851 collections very soon; name them up to the end of Compositae and in the course of the summer determine many of the Monopetalous families. I have already named and described a few of these and some Apetalae to please Col. Graham, and named a new Pentstemon after him (which I have growing too) which compliment seems to gratify him."

Gray's letter of Jan. 23, 1852,- "...I am printing on the Plantae Wrightianae, the 1st part of which (as I work in so much general matter, especially Tex.-Mexican) to the end of Compositae, will make 225 pages or more, with 10 plates — the most important memoir I ever wrote — and will indelibly fix our names on the Texas-N.Mexican Flora. I mail you herewith sheets numbered 3, 4, 5, and when I go down to the Printing Office will send you 2 or 3 more, and the rest as they come off. You will see that I work in novelties from the new collection."

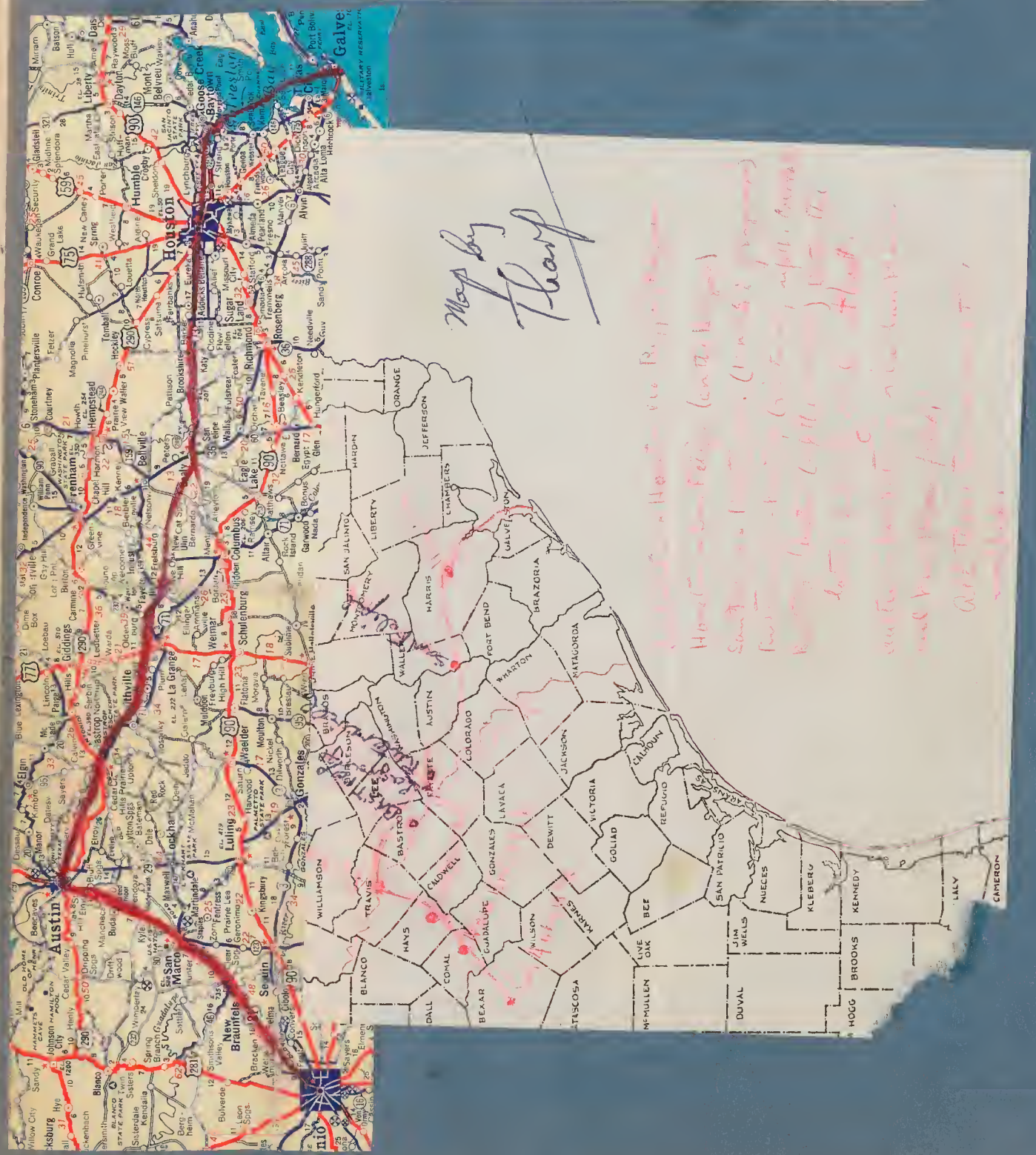
Gray in his letter of June, 7, 1850 wrote,"I send you the first sheet of Plantae Wrightianae". In May, 6, 1850 he had written,- "I begin to print Plantae Wrightianae, quarto, before I go [to Europe] — study in England — and publish the rest this autumn with several figures. Sprague is already at work on them." Gray returned from Europe Sept. 1851.

I am enclosing a part of a Texaco road map for Texas on which I have drawn in what seems to be the most probable route taken by Wright from Galveston to Austin. On this map I think you will find all of the points mentioned in Wright's account. I thought this map might be better than the scant outline I used in my letter a day pr two ago.

Jan 16, 1941

Cordially yours,

B O Clark.



Charles Wright journey of Apr.-Oct. 1849; For itinerary see Geiser Field & Lab 4: 23-32 (1935).

1.	Drosera	Galveston Island		Apr. 28, 1849
2.	Chelidonium	"	"	
3.	Baptisia	"	"	
4.	----	"	"	
5.	-----	"	"	
6.	Scrophulariaceae	"	"	fl light purpl.
7.	Neottia	"	"	
8.	Samolus	"	"	fl, white
9.	Cyperus	"	"	
10.	Galium	"	"	
11.	Malva	"	"	
12.	Trifolium	"	"	T. macrocalyx?
13.	Erigeron	"	"	E. scaposum
14.	-------	"	"	
15.	Samolus	"	"	fl light purp.
16.	Tillea Drummondii ?	"	"	
17.	------	"	"	
18.	Sabbatia	"	"	S. angularis
19.	Coreopsis	"	"	
20.	--------	"	"	
21.	Paspalum	"	"	
22.	Plantago	"	"	
23.	Cyperaceae	"	"	
24.	Cyperaceae	"	"	
25.	Oenothera	"	"	O. Drummondii ?
26.	Linum	"	"	
27.	Petalostemon	"	"	
28.	Sisyrinchium	"	"	
29.	Heliotropium	"	"	

30.	Psoralea	Galveston Island	April 28, 1949
31.	-----	Travis Co., west of Houston	May 5, 1949
32	Coreopsis	" " " "	
33.	Carex	" " " "	
34.	Amaryllidac.	" " " "	
35.	Dracocephalum ?	" " " "	
35.	Umbelliferae	Travis Co., prairies west of Houston	M.5, '49
37.	Aletris	" " " " "	
38.	Erigeron	" " " " "	
39.	Juncus	" " " " "	
40.	Umbelliferae	" " " " "	
41.	Carex	" " " " "	
42.	Cyperus	" " " " "	
43.	Actinella ?	" " " " "	
44.	Panicum ?	" " " " "	
45.	Cyperus	" " " " "	
46.	Rhynchospora	" " " " "	
47.	Panicum	" " " " "	
48.	Verbena	" " " " "	
49.	Neottia	" " " " "	
50.	Plantago	" " " " "	
51.	Urtica	" " " " "	
52.	Scirpus	" " " " "	
53.	Kyllingia	" " " " "	
54.	Scleria	" " " " "	
55.	Scleria	" " " " "	
56.	Lupinus	prairies near the Brazos	May, 6, 1849
57.	Hedyotis	" " "	
58.	Oenothera	" " "	
59.	Apogon	" " "	
60.	Krigia occidentalis	" " "	

61. Aster — prairies near the Brazos — May, 6, 1849
62. Rumex — " " "
63. Actinella ? — " " "
64. Galega — " " "
65. Lespedeza — " " "
66. Desmodium — " " "
67. Paspalum — " " "
68. Erigeron — " " "
69. Polygala — " " "
70. Paspalum — " " "
71. Oenothera — prairies near the Brazos, east side — May 6, 1949
72. Oenothera tripetala — " " " " "
73. Pinus — " " " " "
74. Phlox — " " " " "
75. Loeflingia — " " " " "
76. Paronychia ? — " " " " "
77. Coreopsis — " " " Sandy mounds
78. Aster — " " "
79. Apogon — " " " " — May 7, 1949
80 Psoralea — " " " "
81. Lathyrus — " " " "
82. ----- — Brazos bottoms
83. ------- — " "
84. Carex — " "
85. Tillandsia — " "
86. Cerastium — " "
87. Galium — " "
88. Umbelliferae — " "
89 " — " "
90 Compositae — " "
91. " — " "

92. Carex Brazos bottom May 7, 1949

93. "

94. "

95 ------

96. Sanicula

97. Geum

98. Gramineae

99. Plantago

100. ------

101. Gramineae

102. "

103. "

104. Cruciferae

105. Urtica

106. Ranunculus

107. Salix Brazos river bank

108. Engelmannia prairies west of Brazos

109. Echinacea black rays purp.

110 Gaura

111. Cyperaceae

112. Scirpus

113. Cyperus

114. Scirpus

115. Rhynchospora

116. Umbelliferae

117. "

118. Cyp

119. Gramineae

120. Carex

121. Gramineae

122. Carex

123. Coreopsis — wet prairies west of the Brazos — May 7, 1849

124 Gaura tripetala — prairies west of the Brazos

125. Scleria

126. Verbena

127. Psoralea

128. ------- minor

129. Isolepis ?

130 Rhynchospora

131. Salvia azurea

132. Compositae

133. Gramineae — sandy post-oak woods, Crump's ferry - Bellville

134. Isolepis ? — sandy wet soil

135. Paspalum — sandy post-oak woods

136. Hypericum — Prairies

137. Gramineae — sandy post-oak woods

138. Plantago — " " "

139. Gramineae — " " "

140. " — " " "

141. Desmodium } Found growing together in sandy post-oak woods — May, 8, 1849

142. " }

143. Nyctagineae — sandy post-oak woods

144. Carex — springy place in post-oak woods

145. Scirpus — streams in post-oak woods

146. Cyperus — " " "

147 Umbelliferae — " " "

148. Carex — " " "

149. Panicum — " " "

150. Umbelliferae — springy places post-oak woods

151. Carex

152 Cruciferae — samdy post-oak woods

153. Cyperus — " " "

154. Diodia sandy post-oak woods, betweem Brazos & Mill Cr. May, 9, 1949

155. Carex

156. Capsella

157. Coreopsis

158. Echinacea with whitish rays; post-oak woods

159. Desmodium in wet places in post-oak woods

160. Isolepis ? wet sandy post-oak woods

161. Halea ? " " " "

162. Eriocaulon springy places, post-oak woods

163. Hypericum " " " "

164. Iridaceae post-oak woods

165. Tradescantia " "

166. Commelyna " "

167. Erythraea "" "

168. Galardia bicolor " "

169. Cyperus retrofractus " "

170 Scleria " "

171. Onosmodium black-land prairies (Fannin Prairie)

172. Brazoria " "

173. Scutellaria " "

174. Boraginaceae " "

175. Galium " "

176. Euphorbiaceae " "

177. Scirpus

178. Thalictrum Cumming's Creek May, 10, 1849

179. Asclepias high prairies

180. Pentstemon sandy post-oak woods

181. Equisetum edge of thicket in black prairies

182. Phlox Drummondii sandy prairies

183. Coreopsis

184.	Carex	Creek bottoms	May, 10, 1849
185.	----	Cumming's Creek bottom	
186.	Lupinus	Rutersville	May, 12, 1849
187.	Compositae		
188.	Umbelliferae		
189.	"		
190.	"		
191.	Cyperus		
192.	Rudbeckia bicolor		
193.	Compositae		
194.	Scrophulariaceae		
195.	Compositae		
196.	Actinella		
197.	Cyperus		
198.	Indigofera		
199.	Pentstemon		
200.	Leguminosae	from a cultivated plant, but native of W. Texas	
201.	Cyperaceae	Rutersville	
202.	Malva	"	
203.	Iridaceae	sandy post-oak woods on Colorado	May, 15, 1849
204.	Gramineae	Rutersville	
205.	Aster	" , in thickets	
206.	Gramineae	" "	
207.	"	hog-bed prairies	
208.	Cyperaceae	" "	
209.	Monarda	glades in post-oak woods	
210.	Coreopsis	" " "	
211.	Trichocoronis Wrightii	hog-bed prairies on Colorado	
212.	Asclepias	" " " "	
213.	Carex	" " " "	

214.	Scirpus	branch in post-oak woods	May, 15, 1849
215.	Umbelliferae		May, 18, 1849
216.	Nicotiana	banks of the Colorado above Bastrop	(Bastrop)
217.	Solanaceae?	" " " " "	
218.	Desmanthus	hills of the Colorado	May, 19, 1849
219.	Leersia	Colorado bottoms	
220.	Cucurbitaceae	woods near the Colorado	
221.	Euphorbiaceae	black-prairies on Colorado	
222.	Lindgeimera texana	woods & prairies on Colorado	
223.	Helianthemum	sandy post-oak woods	
224.	Hosackia	woods and prairies	
225.	Linum	edge of post-oak woods	
226.	Rhamnus	edge of black-land prairies	
227.	Capsicum	with last and supported by it	
228.	Chondrosium foeneum	Austin, in prairies	May, 23, 1849
229.	Desmodium	" in thickets	(Travis Co.)
230.	Crassula	" pebbly hills	
231.	Euphorbiaceae	" sandy hills	
232.	Houstonia	" " "	
233.	Euphorbiaceae	" " "	
234.	Mimosa	edge of woods on pebbly hills	
235.	Chondrosium ?	Austin, small prairie adjoning woods	
236.	Gramineae	black-land prairies on Colorado	
237.	Petalostemon	Austin	
238.	Sesleria dactyloides	prairies on Colorado	
239.	Compositae	sandy prairies, Austin	
240.	Euphorbia	sandy woods, "	
241.	Compositae	edge of thickets, "	
242.	-----	-------	
243.	Cassia	hills at Austin	

244.	Melampodium	hills at Austin	May, 23, 1849
245.	Euphorbiaceae	" " "	
246.	"	sandy prairies at Austin	
247	Malvaceae	damp " " "	May, 24, 1849
248.	Carex	woods , Austin	
249.	Euphorbia	thickets "	
250.	Gratiola	edge of water "	
251	Gramineae	woods, "	
252.	Umbelliferae	edge of water "	
253.	----	running water "	
254.	Centauria [spell??]	prairies, Austin - Rio Grande	
255.	Gramineae (Hilaria)	forms dense turf in prairies at Austin	
256.	Asclepiad.	woods, Austin	
257.	Euphorbiaceae	rocky ridges near Austin	
258.	Tetragonotheca texana	rocky prairie, Austin	
259,	Asclepiad.	prairies, Austin	
260.	Carex	cedar-thickets, Colorado bottoms	
261.	Euphorbiaceae	woods, Austin	
262.	Scutellaria	" "	
263.	Copmositae	prairiea "	
264.	Rivinia	Colorado bottoms, Austin	
265.	Carex	" " "	
266.	Leersia	" " "	
267.	Galardia	prairies, Austin	
268.	Erythraea	wet limestone ledges, Austin	
269.	Oenothera serrulata	woods & prairies, Austin	
270.	Pycnanthemum	prairies, Austin	
271.	Lygodesmia	black-land priaries, Austin	
272.	Boraginaceae	Colorado bottom in sand	
273.	Euphorbiaceae	sandy bottoms	
274.	Cucurbitaceae	Colorado bottom	

275.	Euphorbiacaea	Colorado bottom(Austin)	May, 24, 1849
276.	Petalostemon	edges of woods, Austin	
277.	Gilia rigidula	prairies, Austin	
278.	Asclepiad.	rocky hillsides, Austin	
279.	Agassiza suavis	Austin	May 25, 1849
280.	Eysenhardtia	"	
281.	Zanthoxylum	"	
282.	Cucurbitaceae	"	
283.	Asclepiad	"	May, 27, 1849
284.	-----	floating in water, San Marcos	
285.	Vitis	San Marcos	
286.	-------	" , blackland prairiess	
287.	Asclepiad.	"	
288.	Yucca	Austin, San Marcos, etc.	
289.	Malva digitata (Callirhoe pedata)	edge of thickets, San Marcos, etc.	May, 28, 1849
290.	Alyssum	banks of Rio Blanco	
291.	Gramineae	" "	
292.	Melanthaceae?	" "	
293.	Vitis	thickets near the Blanco	
294.	Lythrum	black-land prairies, wet.	
295.	Passiflora lutea?	thickets on prairies	
296.	Asclepiad.	" on Blanco	
297.	Coreopsis	wet black prairies - Guadalupe	May, 29, 1849
298.	Ruellia	prairies , Guadalupe	
299.	Compositae	" "	
300.	"	" "	
301.	Acacia	" "	
302.	Asclepias	banks of Guadelupe	
303.	Allium	prairies near the Guadalupe	
304.	Helianthus	roadside, black prairies at New Braunfels	

Wright left San Antonio late in the day and arrived in camp late at night on May 31st. The main party on this the first day out from San Antonio made 15 miles and camped on the present Medio Creek on the way to Castroville.

The second day the party ~~reached~~ camped at Castroville, the night of June 1st. This was then a town of about 500 pop. on the west bank of the Medina (Medina County)

The third day they moved 10 miles to the German village of Quihi and there camped the night of June 2nd.

The weather having been very rainy and roads bad, the next two days were spent reaching the Rio Hondo, only eleven miles from Quihi. Camp was made on the Hondo the night of June 4th.

305.	Actinella ?	along streams near New Braunfels	May, 29, 1849
306.	Paspalum Eriochloa	prairies	
307.	Silphium	black prairies	
308.	Asclepias	hillsides in black prairies	May, 30, 1849
309.	Oenothera serrulata	"	
310.	Nyctagineae Acleisanthes longif.	roadsides near San Antonio	
311.	Cucurbitaceae	thickets " "	
312.	Gramineae	black praireis " "	
313.	Cnicus	" " " "	
314.	Gramineae	" " " "	
315.	Cucurbitaceae	" " " "	
316.	Nyctagineae capitata	roads near San Antonio	
317.	Malvastrum ?	gardens, San Antonio	
318.	Condailya	prairies west of San Antonio	
319.	Potomogeton nodosus	ponds west of San Antonio	
320.	Dalea nana ?	prairies west of San Antonio	June 1, 1849
321.	Compositae	" " "	
322.	Micromeria	on the Medina, high banks	
323	Malpighiaceae	banks of the Medina	
324	"	" " "	
325.	Scrophulariaceae	" " "	
326.	Petalostemon	" " "	
327.	Dasylirion texana	banks of the Hondo, dioecious, 6-10ft	June 4, 1849
328.	Manfreda	" " "	
329.	----	" " "	
330.	Convolvulus	thickets in prairies west of Medina	
331.	Juglans	bottoms of streams	
332.	Carya olivaeformis	banks of streams	
333.	---	banks of the Hondo	
334.	Asclepiad.	hills west of Quihi	
335.	"	" " "	

On June 5th the road led nine miles to the Seco, over almost impassable hog-wallow prairie. Camp was made on the Seco two miles above the present D'Hanis, then an embryo settlement of Germans in Medina County.

On June 6th the train passed over Rancheros (or "Comanche") Creek, a branch of the Sabinal. Fourteen miles beyond the Sabinal, after crossing the Blanco River ("Comanche Creek") they camped on the Rio Frio the night of the 6th. They remained there the next day.

Wright's collections beginning with June 6th are from what is now Uvalde County

↑ Correct local name!

336.	Carlia podocaph.	near the Hondo and westward on rocky hills	June 4, 1849
337.	Leguminosae	on the Seco , bush 6-10 ft high	June 5, 1849
338	Euphorbiaceae	on hills of the Seco	
339.	Amaryllidaceae	" " "	
340.	Euphorbiaceae	bottom of the Seco	
340½	Cryptogamae	in clefts of rocks on the Seco	
341	Compositae	damp places near the Seco	
342.	Leguminosae	hills of the Seco	
343.	Cuscuta	" " "	
344.	Mentzelia	" " "	
345.	Scrophulariaceae	in thickets on the Seco	
346.	Gaura parviflora	everywhere in Western Texas	
347.	Compositae	prairies on the Seco	
348.	Oenothera serrulata ? var.	on the Sabinal	June 6, 1849
349.	Euchroma	" " "	
350.	Dalea nana	prairies on the Sabinal	
351.	Gaura	" " "	
352.	----	Sabinal and westward	
353.	Matricaria?	prairies west of the Sabinal	
354.	Leguminosae	" " " "	
355.	Euphorbia	" " " "	
356.	Compositae	hills of the Rio Frio	
357.	"	" "	
358.	"	" "	
359.	Justicia	banks of Rio Frio	
360.	Gramineae	high lands on Rio Frio	
361.	" Trichachne cal."	" "	
362.	Leguminosae	prairies west of San Antonio	
363.	cryptogams	bluffs of Rio Frio	
364.	Compositae	high prairies, from Frio west	
365.	Cuscuta	high hills on the Frio	

Party remained in camp on the Rio Frio June 7th.

central Uvalde County

366.	Malvaceae	hills on the Frio	June 6, 1849
367.	----	" "	
368.	Cuscuta	" "	
369.	Gramineae	" "	
370.	Condalia	" "	June 7, 1849
371.	Panicum [illegible]	" "	
372.	Gaura	" "	
373.	Gramineae	" "	
374.	Aristida	" "	
375.	Compositae	" "	
376.	"	" "	
377.	Cucurbitaceae	bottoms of the Frio	
378.	Commelyna	" " "	
379.	Gilia incisa	hills of the Frio	
380.	Boerhaavia linearifolia Nyctagineae	" " "	
381.	Salvia	" " ", in shade	
382.	Nolina Lindheimeriana -—-	bottoms of the Frio	
383.	Erythraea	" " "	
384.	Polygala	hills of the Frio	
385.	Vesicaria	gravelly bars of the Frio	
386,	Thelesperma Compositae	hills on the Frio	
387,	Gramineae	" " "	
388.	"	" " "	
389.	Cenchrus myosur.	banks of the Frio	
390.	"	" " "	
391.	Eragrostis curtip[illegible]	" in " "	
392.	----	" " "	
393.	Tragia	hills of the Frio	
394.	Allionia (Nyctaginese)	banks of Frio	
395.	Cuscuta equals 395?	hills of the Frio	
396.	Aster	" "	

On June 8th, leaving the Rio Frio, the party left the "Wool Road" (San Antonio to Eagle Pass), and took a northwesterly course to Camp Inge on the Leona (which was near a rocky conical hill or mound now known as "Inge Mountain", about 2 miles south of the present town of Uvalde)

Wright remained with the party camped on the Rio Leona until June 19th.

Uvalde County

397. Actinella scaposa hills of the Frio June 7, 1849

398. Cuscuta (equals 395?) " " "

399. Gaillardia " " "

400. Zanichellia ? Najas guadalupensis in the Leona June 8, 1849

401. Smilax? bottom of the Leona

402. Portulacaceae " " "

403. Gramineae " " "

404. Passiflora banks of the Leona June 9, 1849

405. Scirpus bed of the Leona

406. Galactia banks of the Leona

407. Potomogeton illinoensis currents of the Leona

408. Cuscuta " " "

409. Ludwigia " " "

410. Melothria pendula Leona bottom

411. Malvaviscus " "

412. Cuscuta (equals 385?) hills of the Leona

413. Vesicaria " "

414. Euphorbia " "

415. Oenothera " "

416. Ruellia Leona bottom

417. moss on logs " "

418. Prunus " "

419. Commelyna " "

420. Cuscuta on Dalea

421. Rhamnus texensis Leona and common everwhere June 12, 1849

422. Leguminosae uplands of the Leona

423. " " " "

424. chara bed of the Leona

425. Euphorbiaceae bottom of the Leona, 3-4 ft. tall

426. Ungnadia Leona bottom, 8-12 ft. tall June 13, 1849

427. Diospyros

Wright was camped on Leona (near site of present Uvalde)
until June 19th

427. Diospyros texana — Leona bottom, 8-12 ft. tall — June 13, 1849

428. Cuscuta — prairies on the Leona

429. Bolivaria — " " "

430. Helianthus — " " " (saline?)

431. Compositae — " " Seco & westward

432. Actinella — " " Leona

433. Rhamnus obtusifolius " " "

434. moss on logs, Leona bottom.

435. Calia erythrosperma hills, Austin & in Leona bottom

436. chara in the Leona

437. moss logs, Leona bottom

438. --- on rocks under water in the Leona — June 14, 1849

439. -- in the edge of water in the Leona

440. Oenothera speciosa Leona bottom — June 15, 1849

441. Nyctagineae (Allionia incarn.) near head of the Leona

442. cryptogams (Pellaea ovata) Leona mound

443. " " "

444. " " "

445. Gramineae (Heteropogon) " " in dense tufts

446. " (Trichachne Cal.) " "

447. Salvia " "

448. characeae in the Leona in eddy water

449. " in the Leona

450. Tragia Leona bottom with monstroa? fruit

451. ---- small tree in edge of bottom on Leona — June 16, 1849

452. Ambrosia thicket and upland of the Leona — &June 18, 1849

453. Cyperus edge of ponds near the head of the Leona

454. stagnant water near head of Leona

455. Zanichellia pond near head of the Leona, stagnant water

456. chara " " "

457. " " "

Uvalde County

Captain French's party, to which Wright was attached, remained on the Leona (near the preset Uvalde) until June 19th, when the expedition moved to the head of the Leona (a mile above the railroad crossing at Uvalde) and then passed in a northwesterly direction for about nine miles to the crossing of the Nueces River where they camped the night of June 19th.

Two days, June 19 and 20, were taking to traverse the ~~20~~ 10 miles between the head of the Leona and the head of Turkey Creek. The route taken probably followed the present course of the railroad to the vicinity of the present Obi Hill, and then followed the route later taken by the present Uvalde-Cline-Brackett road

The camp on the evening of June 20th was probably made near ~~the present Asphalt Mountain~~, at the head of Turkey Creek in western Uvalde County (somewhere near Cline)

Travel being impossible because of heavy rains and bad roads the party remained at Turkey Creek until June 29th.

16

458.	Panicum	edge of pond near head of Leona	June 18, 1849
459.	characeae	" " "	
460	Carex	" " "	
461.	Panicum	" " "	
462.	Dalea	high prairie near the Nueces	June 19, 1849
463.	Coreopsis	eddy water of the Nueces	
464.	Lythrum	in the water of the Nueces	
465.	Umbelliferae	pebbly bars of the Nueces	
466.	Proserpinaca	eddy waters of the Nueces	
467.	Panicum	" " "	
468.	Eriogonum [illegible] ---	on pebbly bars of the Nueces	
469.	(Leucaena retusa Leguminosae	bottom of the Nueces	
470.	Fallugia paradoxa	bottom of the Nueces & westward.	
471.	Verbenaceae	" " "	
472.	Asclepiad.	" " "	
473.	Gramineae Muhlenbergia	" " "	June 20, 1849
474.	Dalea	prairies of the Nueces	
475.	Amaryllidaceae?	high prairies west of Nueces	
476.	(Nolina texana)	high prairies west of Nueces & on cliffs above Austin	
477.	Cyperaceae	Juajalote or Turkey Creek, in dense patches	
478.	Potomogeton illinoensis	in current of the Nueces	
479.	Bolivaria	hills of the Nueces	
480.	Oenothera missouriensis	pebbly bars of Nueces	
481.	Malvaceae	rocky cliffs of the Nueces	
482.	Atriplex canescens --	hills of the Nueces, 4-6 ft. tall.	
483.	moss	margin of springs, Turkey Creek	
484.	Gentianaceae	moist hillsides & margin of stream	June 21, 1849
485.	Juncus	in Turkey Creek	
486.	Utricularia	" " "	
487.	Melochia pyramidata	Turkey Creek, wet places	
488.	Ruellia	" " , open prairie	

(somewhere west of Cline)

Party in camp at Turkey Cr., western Uvalde Co. until June 29th

489. Ambrosia sides of thickets & in proairies from Nueces to Turkey Cr. June 21, 1849

490. Cicuta maculata margin of the Nueces, 4-8 ft. (June 18, 1849)

491. moss. margin of Turkey Cr. in dense tufts (June 21, 1849)

492. Cantua? edges of thickets, Turkey Cr. & common elsewhere June 23, 1849

493. algarobia prairies of west Texas, 20-30 ft. tall, sometimes 12-18 in. diam.

494. Amaryllidac. hills of Turkey Cr., scapes 4-6 ft., fl. pure white

495. Chaetopappa hills near Turkey Cr.

496. Barrattia " " "

497. Euphorbiaceae " " " , suffruticose root-perennial

498. Polygala " " "

499. Malvaceae Sida filipes. " " ", crevices of rocks

500. Euphorbiaceae prairies of Turkey Cr.

501. Bolivaria seeds " "

503. Galium seeds " " 2-3 ft. long procumbent in thickets

502. Convolvulus seeds Hills "

504. (?Centaneae?) prairies on Turkey Cr.

505 Eutoca seeds rocky hills Turkey Cr., 12-18 in. high.

506. filices crevices of rocks, hills of Turkey Cr.

507. Micromeria hills near Turkey Cr.; common, used as tea June 25, 1849

508 Sida filipes hills & crevices of rocks, Turkey Cr., Austin, fl. purp, suberect

509, Physalis hills, Turkey Cr., without nauseous odor of P. viscosa, etc. ~~much branched from root, fl. greenish yellow~~

510. Rhamnus? or Ceanothus rocky hillsides, Turkey Cr., 2-3 ft. tall much branched from root, fl. greenish yellow

511. Celtis pallida rocky hill near head of Turkey Cr., very thorny shrub, 4-8 ft. tall, common from Leona to Rio Grande

512. filices crevices of rocks on hills, Turkey Cr.

513. Selaginella Wrightii n.sp Lycopodium hills, Turkey Cr., on flat rocks slightly covered with earth

514. ---- hills, Turkey Cr., one specimen only

5151 Aphora humilis ? hills & prairies near Turkey Cr.

516. Asclepiad. climbing over small bushes, hills & high prairies Turkey Cr. & elsewhere

In camp on Turkey Creek, western Uvalde Co., until June 29th

517. Euphorbiaceae high hills, Turkey Cr., 1-2 ft. tall June 25, 1849

518. Anemia mexicana filices on rocky branches in shade of trees & bushes near Tur. Cr.

519. Hydrocotyle in Turkey Cr. with Typha etc.

520. chara still water, Turkey Cr.

521. lichen Turkey Cr., on elm, liveoak & other trees

522. Myriophyllum still water, Turkey Cr.

523. Rhus Leona - Turkey cr., shrub 3-6 ft. tall on prairies or sparingly in timber

524. Abutilon seeds hills of Turkey Cr. & eastward to Austin

525. Ptelea trifoliata v. mollis margin Turkey Cr., 10 ft. tall June 26, 1849

526. Compositae (not Chaetopappus nor Bellis ex descr.) thickets of the prairies & hills of Turkey Cr., fl. light purp.

527. Malvaceae rocky hillsides near Turkey Cr., in fruit.

528. ---- rocky hills of Turkey Cr., very much branched shrub 6-8 ft. tall, branches spine-tipped, fruit light yellow

529. Lantana Cordia podocephala rocky hills of Turkey Cr., fl. white June 27, 1849

530. Galactia prairies of Turkey Cr., climbing on little bunches of bushes

531. Hedyotis common, prairies of Turkey Cr. & elsewhere

532. Ludwigia in Turkey Creek, common elsewhere also.

533. Prunus prairies of Turkey Cr., forming little thickets, 2-3 ft. tall

534. Leguminosae (Rhynchosia texana) climbing over little bunches of bushes on prairies of Turkey Cr.

535. Heliomeris tenuifolia hills & rocky cliffs of Turkey Cr. suffruticose, 1-2 ft. tall

536. Polygala high rocky cliffs of Turkey Cr., & in similar places from the Colorado to the Rio Grande

537. Palafoxia high rocky cliffs of Turkey Cr.

538. Erythraea " " " " "

539. Oxalidaceae June 28, 1849 level alluvial prairie near Turkey Cr. & westward beginning to flower again after the late heavy rain

540. Linum. prairie of Turkey Cr.

541. Mentzelia hills of Turkey Cr., much branched from base, main branch 1-2 ft. long spreading, fl. in morning, yellow

542. Acacia hills of Turkey Cr. 1-3 ft. high

543. Usnea on 544 and other legumes, high rocky hills near Turkey Cr.

In camp on Turkey Cr, western Uvalde Co, June 20-29th

On the morning of June 29th, following what is now the Cline-Brackettville road (U.S. no. 90), a march of 13 miles brought Wright's party to the bed of Arenosa Creek ("Live Oak Creek") and ≠ 3 miles further to Elm Creek.

Beginning with June 29th Wright's collections are from Kinney County

7 miles beyond Elm Creek the road past the head of of Las Moras Springs which give rise to Las Moras Creek which flows into the RioGrande. These springs lie in the present town of Brackettville, Kinney County. The party camped at Las Moras (Brackettville) July 1-2.

Leaving Brackettville on July 3rd the party travelled over dry uninteresting county seven miles to Pinto Creek (Piedra Pinta or Piedras Pintados). The crossing being difficult they camped that night on this creek.

On July 4th the party made 9 miles to the crossing of "Mud Creek" (Zacate or Zoquete Cr.) Collections were made here and on the nearby ~~Sycamore~~ Zacate Cr (Arroyo Pedro) from the 4th to the 6th of July.

The part of Sycamore Creek which they crossed is now the county line between Kinney and Val Verde counties.

This is Sycamore Creek at Kinney-ValVerde county-line!

544. Mimosaceae rocky hills near Turkey Cr., 4-6 ft. tall June 28, 1849

545 Nyctaginaceae (Aclusanthes aniso.) high prairies at foot of hills near Turkey Cr.

546. cactus seeds high rocky hills of Turkey Cr.

547. cucurbit seeds prairies of Turkey Cr.

548. cactus seeds high rocky hills of Turkey Creek

549. " " " " " " "

550. Houstonia high prairies of Liveoak Cr.? and to the Las Moras June 29, 1849

551 Calandrinia (Talinum angustissimum) bottoms of Liveoak Cr. & Las Moras

552. Krameria prairies of Liveoak Cr. 1-2 ft. tall

553. Oenothera " " , 6-12 in. tall

554. Gaura " " , fl. yellowish-white, nearly white

555. -- " "

556. Sida " " fl orange

557. Leguminosae " " June 30, 1849

558. ---- on Elm Creek

559, Dalea prairies on Liveoak Cr.

560. Oenothera " "

561. Vesicaria bottoms "

562. Cuscuta prairies "

563. Aplopappus " "

564. Apocynaceae " " ,fl white, border outside tinged with red

565. Lobelia Elm Cr., margin of water, fl blue

566. cactus prairies on Elm Cr.

567. Scirpus in Elm. Cr.

568. --- banks of Elm Cr.

569. --- banks of Elm Cr., shrub 3-5 ft., fl greenish (all female?)

570. Amaryllidac.? banks of Elm Cr. 4-6 ft. tall, fruiting, fl bright scarlet

571. Leguminosae (Cercidium texana) branching shrub on prairies 2-5 ft. tall July 2, 1849

572. ---- prairies at head of Las Moras; much branched shrub, 2-4 ft. tall, fl. (pistillate only) greenish

All are from Kinney County

For itinerary see previous page.

July 2, 1849

573. Lantana prairies & edges of thickets from Guadalupe to Rio Grande not very common, 3-5 ft. tall, fl yellow

574 Onosmodium bejariense Las Morasbottom, several stems from root, in fruit

575. Passiflora prairies on the Las Morras, quite common fl. yellow with greenish tinge

576. Euchroma? alluvial soils from Las Moras to R.Grande, 1-3 ft. tall

577. Compositae alluvial prairies

578. Graminae prairies west of Las Moras

July 3, 1849

579. Ricinus ? alluvial prairies on Piedra Pinta

580. Scirpus in the Piedra Pinta creek

581. Asclepias alluvial prairies on the Piedra Pinta

582. Gaura prairies from Piedra Pinta to Zacate creek

583. Clavigera prairies on Zacate Cr.

July 4, 1849

584. Lythrum in wet flat of Zacate Cr. with Scirpus, Typha etc.

585. Coldenia canescens alluvial prairies on Zacate Cr.

586. Convolvulus climbing bushes near Zacate Cr.

587. Scirpus Zacate Cr.

588. " "

589. Sphaeralcea stellata ? low ground near Zacate Cr., 1½-3 ft. tall

590. Graminae prairies on Zacate Cr.

591. Juncus in Zacate Cr.

592. Potomogeton illinoensis " "

593. Ruellia alluvial prairie near Zacate Cr. fl white

594. Abutilon prairies from the Seco westward, common

595. Abutilon prairies from the Brazos westward, common

596. Acacia lutea Zacate Cr. and elsewhere on low & level prairie

July 5, 1849

597. Scirpus Zacate Cr., wet flats, the long slender culms bend to ground or surface of water where seeds of spikes germinate, thus it spreads and forms large thick patches in damp soil or shallow water

598. Gramineae Bouteloua curtip. common on level prairies bordering Zacate Cr.

599. Leucophyllum texana high prairies, 3-6ft, common from S. Antonio westward

July 6, 1849

The 9 miles from Sacatosa Sycamore Cr. (" a small creek beyond Zacate Cr") To San Felipe was stony and barren with growths of cactus and chaparral

Passing Sycamore Cr. (i.e Zacate Cr.) the party was in present day Val Verde County

Wrights party reached the San Felipe Springs and Creek (near present Del Rio, Valverde Co.) on July 7th. Here they remained two weeks.

They camped about half a mile below San Felipe Spring. This spring 50 ft. in diameter bursts forth out of limestone in a flow of greenish-blue water (about 75 millon gallons per day). The runoff of this and other springs forms San Felipe Creek which flows into the Rio Grande 5 miles to the south.

600. Leguminosae high pebbly plains west of Zacate Cr. July 6, 1849

601. Leguminosae high pebbly plains west of Zacate Cr.; the legumes burst elastically & scatter seeds on ripening

602. Passiflora high pebbly prairies west of Zacate Cr.

603. (Froelichia) Eriogonum pebbly bed of a small creek beyond ZacateCr.

604. (Boerhaavia linearifolia) Nyctagineae " " " "

605. Salvia " " " ", fl light purple

606. ----- high prairies, much branched shrub 3-5 ft. tall

607. Gramineae high prairies of the San Felipe

608. Scutellaria low prairies of the San Felipe

609. Compositae calcareous hills of the San Felipe July 7, 1849

610 Cruciferae " " "

611. Compositae " " "

612. Cuscuta " " "

613. Tragia " " "

614. Compositae " " "

615. Euphorbia " " "

616. ------- " " ", suffruticose, much branched from the root, fl white

617. Leguminosae calcareous hills of the San Felipe

618. Polygala " " " ", many stems from one root, perennial

619. Passiflora calcareous hills of San Felipe, equals no. 602

620. Physalis " " " , fl yellow

621. Scrophulariaceae " " ", fl. light purp.

622. Salvia " " ", fruticose 2-4ft, fl bluish-purp.

623. Rutaceae " " "

624. Onosmodium " " "

625. Abutilon " " "

626. Euphorbia " " "

627. (Setaria (x0800)) Gramineae bottoms of the San Felipe

628. (Gomphrena) ----- " " " " "

In camp near Del Rio, Texas

July 7, 1849

629. Scrophulariaceae bottoms of the San Felipe, fl.very light purp.

630. Ludwigia & Lemma at the head of the San Felipe

631. Acacia? prairies at head of S. Felipe, much branched shrub 2-3ft, fl. gold-ye yellow

632. Gilia viscidula aceroso hills at head of San Felipe

633. Leguminosae " " "

634. Heliotropium angustifolium hills, head San Felipe (=#480)

635. Polygala hills, head of S. Felipe, much branched from root, perennial

636. crucifer " " ", fl white, second flowerw g

637. Loasaceae " " " fl yellow

638. Abutilon seeds " " "

639. Mimosae seeds " " "

640. Byttneriaceae seeds " " "

641. Mimosaceae seeds " " ,common on prairies

642. Oxalidaceae prairies, common, growing more luxuriantly in shade

643. cactus on bluffs of San Felipe, 6-8 in or even 12 or more in. high, 6-10 in. diameter, fl open in morning, close before night

644. Nyctaginae Senhenbergia bluffs of San Felipe; much branched, glutinous

645. ---- " " "

July 9, 1849

646. Clematis prairies, San Felipe

647. Euphorbia " "

648. Cyperaceae margin of San Felipe

649. Convolvulaceae banks of San Felipe

650. Equisetum " " "

651. Compositae prairies of San Felipe

652. Hymenatherum top & side of San Felipe mound

653. Guaicum " " "

654. Portulaca pilosa " " "

655. Eriogonum " " "

656. Gramineae " " "

657. " " " "

In camp near San Felipe Spr. near Del Rio Texas

23

658. Gramineae prairies on the San Felipe July 9, 1849

659. Compositae " " "

660. --- " " "

661. Condalia microphylla the San Felipe much branched shrub
3-5 ft. tall, fl. greenish-white

662. Amaryllidaceae found on the Howard and the San Felipe, abundant,
growing on banks near creek

663. Asclepiad common from Austin to the San Felipe

664. Salix Humboldtiana = no 668 San Felipe Spring, 11-15 ft. July 11, 1849

665. Scrophulariaceae prairies of San Felipe Cr.

666. Salvia " "

667. Smilax " "

668. Convolvulus " "

669. Allionia incarnata Nyctagin. " "

670. Gramineae Trichachne insularis " "

671. " " "

672. Oxybaphus Nyctaginac. " "

673. ----- high prairies if S. Felipe; shrub with a small red
2-seeded berry

674. Lantana low prairie of San Felipe Cr. among brush, fl. light purp.

675. Indigofera bottom of San Felipe Cr. and others east
to the Rio Hondo July 13, 1849

676. Aplopappus high praries of San Felipe Cr.

677. Leguminosae " " "

678. Polygala high " " , fl. greenish

679 Gilia insignis low " " fl. bluish purp.

680. (Yucca) ~~or Agave~~ Mexican bayonet or dagger, fruit : Liliaceae
high prairies, San Felipe Cr.

July 17, 1849

681. Boraginaceae high prairies of S. Felipe Cr., fl. white becoming ochroleucous

682. Acleisanthes crassif. Nyctaginac. " ", fl white with tinge of red

683 Aristolochia Coryi " " "

684. Cryptantha Jamesii var. high. prair. S. Felipe, fruiting, fl white

685. ------ (mosses)adhearing to rock deep under water in springs
tributary to the San Felipe

In camp near San Felipe Springs, near Del Rio, Texas July 7- 21.

July 22nd. the wagon-train left San Felipe Springs for Devils River, 11 miles away. This river was crossed at a ford near where Sells Creek enters the river from the west. The road ascends the tableland beyond Devils River by the arroyo of Sells Creek. The company camped for the night of July 22nd. at a spring 2½ miles up this creek.

From now on, until the wagon-train left the valley of Devils River at Johnson's Draw, progress was slow, averaging only 6 miles a day. North of present Comstock, the route taken is approxomately that of the present Comstock-Ozona highway. They approached the Devils River, and crossed to the left (east!) bank at a point about 3 mi. south of the 30th Parallel; and between that point and present Juno subsequently crossed and recrossed the Devils River. This occupied until Aug. 2nd.

due north of Comstock on Comstock-Ozona road.

Note Among member of the expedition, judging from their writings, the Devils River was usually called the Rio San Pedro Wright consistently calls it the Devils River during the expedition of 1849. During his expedition of 1851-52 he calls it the San Pedro. The current name for the river is,- Devils River.

July 17, 1849

686 ---- aquatic margin of water near springs tributary to S. Felipe among cyperaceae and other aquatics

687. Trichocoronis rivularis outlets of springs tributary to S. Felipe blooming profusely above and beneath surface, fl. white

688. Agave Lechuguilla Yucca Spanish Bayonet, fruiting high prairies of S. Felipe and east to the Medina

July 19, 1849

689. (Talinum angustissima Portulaceae low prairies of San Felipe, fl. expand in afternoon and remain open till next midday

July 20, 1849

690. Cyperaceae small branch of the San Felipe

691. Trichloris Gramineae low prairies " "

692. Lantana? high hills " " fl. white suffruticose $1\frac{1}{2}$-$2\frac{1}{2}$ ft. tall

693. Cyperaceae small branch of the San Felipe

694. Dalea San Felipe mound, fl purple

695. Setaria (10800) Gramineae low prairies on the San Felipe

696. " bluff of a small branch of the San Felipe

July 21, 1849

697. Smilax high prairies between San Felipe & Devils river climbing over bushes

July 22, 1849

698. Filix crevices of rocky bluff betw. S. Felipe and Devils Riv.

699. Selaginella Lycopodiaceae high rocky bluffs of Devils River abundant

700. Asclepias Banks of Devils River

701. Compositae " "

702. Cucurbit. bottoms of Devils River climbing over tall grass & Bushes

703. Commelyna crevices of rocks, high bluffs of Devils R. in shade

704. Evolvulus bluffs of Devils River fl. blue

705. Pentstemon crevices of rocks on a creek 3 mil. beyond crossing of Devils River, fl. bright scarlet

706. Amorpha ----- prairies near a creek 3 mi. west beyond crossing of Devils River; fl. yellow, mostly in fruit

707 fruit of no. 496? Bumelia hills on and beyond Devils Riv., abundant

July 23, 1849

708. Compositae rocky bluffs, creek 3 mi. beyond Devils Riv. crossing

709. Scrophulariaceae hills of Devils River, fl white

710. ----- above mentioned creek; declivities, fl. white, a much branched shrub. Solanaceae?

Val Verde County

Boerhaavia carlbosa (W. 612) - bears field no. 736

Polygonum camporum (W. 614) bears field no 737 a mistake for 738?

711. Cassia hills of just mentioned creek & elsewhere — July 23, 1849

712. Cyperus bed of a small triburary of same creek, culms glabrous

713. Marsilia with the last

714. Fouquera hills beyond Devils Riv. long branches from rear the root
no fl. nor fruit

715. Compositae hills of Devils River

716. fruit of no. 550 [illegible] Devils Riv. and its branches

717. Salvia hills of Devils River, fruit only — July 24, 1849

718. Boraginaceae (?Heliotropium confertifolium [illegible] ?) " "

719. Oplotheca " "

720. Compositae " "

721. Paronychia " "

722. Rhamnaceae " ", shrub 6-8 ft, fl greenish

723. Ouercus(Emoryi?) pungens ", shrub 6-8 ft. tall

724. Aplopappus bottoms of Devils River

[illegible]

725. Baccharis(texensis?) " "

[illegible]

726. Filix hills of Devils River, crevices of rocks

727. Scrophulariac. hills of Devils River

728. --- hills of Devils River, shrub 2-4 ft. tall — July 25, 1849
fl.found on return trip,white.

729. Mentzelia bottoms of Devils River

730. Scrophulariac.? " " , fl white

731. Cassia " " and east to Austin

732. Linum(rigidum?) " " fl. purple or blue

733. Eryngium " "

734. Passiflora(lutea?) " "

735. Malvac. high hills of Devils River, fl light yellow

736. Euchroma? " " " , fl bright scarlet

737. Nyctaginac. bottoms of Devils River, fl. deep red

738. Polygonum " " "

739. Cuscuta " " "

740. Aristolochia " " " equals no. 683
fl. spotted with purple in the throat

all are in Val Verde County

741. Liliaceae? high hills of devils River July 25, 1849

742. Oenothera bottoms of Devils River, 4-6 ft. tall July 26, 1849
margins of streams to Austin

743. cactus high hills of Devils River

744. Hymenatherum " " "

745. Quercus Sinuata " " " , much branched, 3-5 ft. tall

746. Linum " " "

747. Gramineae " " "

748. ---- " " " , fl. white, crevices of rocks

749. Panicum bottoms " , panicle yellowish, much branched
from root, forming large patches

750. Gramineae hills of Devils River fl white

751. ---- " "

752. cactus " " , fruit lanceolate, smoothe, scarlet, July 28, 1849

753. cactus " ", fruit lanceolate, green

754. Asclepiad. bottoms of Devils River (an at Eagle Pass in 1848)

755. Amaranthac. hills of Devils River, thickets and shady places

756. Verbena " " , nearly or quite to the summit, fl. bright red

757. Compositae Zexmenia? summitof hills of Devils Riv., rock crevices, fl. yellow

758, " declevity of hills of Devils River

759. Krameria Devils River, declivities of hills

760. Gramineae " " " "

761. Abutilon " " " "

762. Dalea Devils River, on high hills, 1-2 ft, tall

763. Gramineae Devils River, high hills

764. Echinocereus flexispinus? , high hills, Devils River 1ft tall 8 in. diamet.

765 Hedyotis Devils Riv., high hills, rock crevices

766. Mammillaria " " " " 4-5 in. broad July 30, 1849
scarcely risingn above the ground

767. Evolvulus Devils Riv., high hills, fl blue

768. Petalostemon " " " ", abundant, keel & wing purp.
Dalea aurea var. (J. no. 131) vexillum yellow

Collections up thru Aug. 2nd. are in Val Verde County, Texas

during the passagethru Crockett County Wright was sick, and no plants were collected. The area not botanized includes most of the Johnson Creek(Johnson Draw) and Howard Creek an Live Oak Creek, all in Crockett Co. The offical milage for the party on this trek was, head of Pecos via Johnson Cr. to Howard Spring (in Howard Cr.) 41.2. miles. Howard Spr. to Live Oak Creek 32.40 miles. The crossing of the Pecos is given as 7.88 mi. above the mouth of Live Oak Creek, but this was passed and the party continued up the east side of the river a total of nearly 40 miles before going over to the west bank (44.5 according to the report)

About a mile below the present town of Juno, at the "summer head" of Devils River, the party turned up Johnson's Draw and roughly followed the ~~present~~ course of the present Juno-Ozona road, in a westerly and northerly direction, to about 7 miles north of the Valverde-Crockett county-line. There they took a westerly course up a ravine out of Johnson's Draw and then descended by another ravine into Howard's Creek, crossing this stream at Howard's Springs. These springs, 41 miles from Devils River, are the only constant source of water between Devils River and Live Oak Creek on the Pecos.

The party left Devils River via Johnson's Draw on August 2nd.

The day the train left Devils River Wright fell ill with maleria, and was completely incapacitated until the Pecos had been crossed and even beyond.

In his MS. list he has written opposite nos. 778-802, " Some of these were spoild during my sickness and thrown away"

769. Solanum — Devils River, high hills, rock-crevices — July 30, 1849
fl. purple, berries red

770. Parthenium — Devils Riv. declivities of hills, fl. white, 2-3 ft. tall

771. Capsicum — " " thick shady bottom, fl. white, 1-3 ft. tall

772. Juniper cedar — " " foot of hills, 5-8 ft. tall

773. Physalis — " " bottoms in sandy soil, fl. purple

774. Calandrinia 2 — " bottoms in sandy soil, fl pale yellow

775. Heliotropium — " " " " " , fl. purple with yellow center

776. Verbonia — " " " " " , fl. deep purple

777. Cassia — " " " " " , fl. yellow with greenish veins
root very long, I never found the bottom though I dug the length of my knife and handle

778. Hilaria Gramineae (Chlorideae) — bottom of Devils River — July 31, 1849

779. Muhlenbergia arenacea (Paniceae) — " " "

780. Cyperus — " " " , abundant

781. Euphorbia — Devils Riv., declivities of hills

782. cruciferae — " " " " , fl yellow

783. ---- — " " " " , fl. purplish

784. Amaranthaceae (Amaranthus) — " " bottoms, 3-4 ft. tall

785. Lepachys — " " borroms

786. Euchroma — " " , declivity of hills, fl. & bracts yellow

787. bachelor-button (Gaillardia) — " " , base of hills — August 1, 1849

788. Nyctaginac. (Senfenbergia) — " " , hills, common, here first seen in flower
flowers purple

789 Dichondra — " " , dense patches, shade of trees & bushes

790. Cyperac. — " " , margin of water — Aug. 2, 1849

791. " — " " " " "

792. Heliomeris — " " hills

793. Panicum plenum — " " bottoms

794. Martynia — " " "

795 — " " hills near summit

796. Oxalis — " " declivities of hills, fl. purple

797. Chilopsis — " " pebbly bars, fl. purple, 8-14 ft. tall

Specimens collected on the 12th and following are in
from Pecos County, Texas

As the expedition took it, the distance between the head of Devils River and the Pecos was 81 miles.

The Pecos was reached (via Live Oak Creek, a few miles from Ft. Lancaster) on Aug. 12th. near the crossing("the ferry") of the Pecos.

From the 12th to the 16th the party travelled up the Pecos (from Live Oak Creek Crossing to near a point about 35 mil below Horsehead Crossing and ~~north~~ present town of ~~Iraan Girvin~~ Iraan!)

French, pg. 51, gives the measured distances(between camps and haulting places) as follows,-

Howard Springs - 32.4 mi. - Live Oak Creek - 7.88 mi. - Ferry of Pecos - 12. 59 mi. - Camp above ferry - 16.23 mi. - Second camp above ferry- 7.74 mi.,- Third camp above; leave Pecos - 18.24 mi. - Escondido Creek - 8.58 mi. - Escondido Springs - 19.47 mi. - Comanche Springs.

French, p. 45, states,- "For the distance of near forty miles, the route lies up the east bank of the river. A few miles below the ferry, the valley of the Pecos disappears, and the mountains on either side approach each other closely. Proceeding up river, they gradually widen out, forming a level valley from one to three miles in width; and a little above where the road leaves the valley, they stretch to the left over the plain in a broken, irregular line"

French says road went up "east" side of Pecos, but this is a mistake! French's map, Emory's map, and other old maps all show the road on the west side of the Pecos. The road crossed the Pecos at the ferry [7 miles above camp on lower Live Oak Creek (i.e near Ft Lancaster)] at a point near present-day Sheffield

798. Amaranthus sclerogonides Amarenthac. Devils River, summit of hills August 2, 1849

799. Gramineae Eriodiod " declevity of hills

800. Gaura " " " "

801. Physalis " " summit of hills & in bottoms fl purple.

802. Abutilon " " declevity of hills

803. Engelmannia prairies betw. Devils River and the Pecos

804. Cantua pebbly bed of branch running to the Pecos, fl. scarlet Aug. 11, 1849

805. Gramineae Prairies of the Pecos Aug. 12, 1849

806. Compositae " " " fl. purple

807. Prionopsis " " "

808. Gramineae Muhl. arenacea. " " " Aug. 13, 1849

809. Cruciferae valley of the Pecos, fl. white Aug. 14, 1849

810. Compositae " " "

811. Solidago " " "

812. Leguminosae " " " fl. yellow

813. Gramineae " " "

814. " Sporobolus Wright " " "

815. Trichloris mend. " " "

816. " " " "

817 Euphorbia Prairies beyond the Pecos Aug. 15, 1849

818. Perezia " " " fl. light purple

819. Gramineae " " "

820. Krameria " " "

821. Oenothera " " "

822. Sidalcea " " " fl. orange-red

823. Leucophyllum minus hills beyond the Pecos , L. Bakeri, 2ft. tall, fl. purp.

824. Compositae prairies beyond the Pecos

825. cactus " " ", 6 ft. tall, branching, branches nearly horizontal, fruit dry yellow

826. cactus hills beyond Pecos, dense hemispherical clusters, fruit smell & tastes like strawberrie

All from Pecos County

Leaving the Pecos on Aug. 16th the road went west over a plain margined by broken ridges. 12 miles from the river the road turned over a gentle hill, and at a distance of 18-20 miles from the Pecos, entered the valley of an intermittent creek, called, in Wright's day, "Escondido Creek". This is now known as Mule Creek. Continuing along Escondido Creek for 8 miles they came to Escondido Springs, where apparently he collected no. 849.

From Escondido Springs to Comanche Springs (the present Fort Stockton) it is almost 20 miles. They camped at Comanche Springs (i.e near Fort Stockton) the night of Sept. 19th., about 46 miles from the Pecos

The official milage of the party is as follows
from Pecos to Escondido Cr. - 18.24 mi.
Escondido Cr. to Escondido Spr. at head of creek 8.58 mi.

Escondido Spr. to Comanche Spr. 19.47 mi.
Comanche Spr. to Leon Spr, 9.57 mi.

hence Pecos to Leon Springs is 55.86 miles
Pecos to Comanche Spr. is 46.29 mil.

"Escondido Creek", " water is found in ponds, some of them quite deep, surrounded by tall growth of rushes and cane. This water is distant from the Pecos about 18 miles and has been called Escondido Creek"-French p.46.

"Eight miles further on are the Escondido Springs. The water gushes out from beneath a shelf of rocks, and flows some distance down the creek"French, lc.

827. Paronychia — a creek beyond the Pecos, rock-crevices — August 16, 1849

828. Dalea — same locality as above

829. Compositae — prairies beyond the Pecos

830. Distichlis Gramineae — same creek as 827, dense growths in creek-bed

831. " — on hillside near above stream

832. Engelmannia — " " " " "

833. Compositae — Prairies beyond the Pecos, fl. purple, one specimen seen

834. Asclepias — " " "

835. Bouteloua eriopoda Gramineae — " " "

836. Asclepiad — on a branch beyond the Pecos and seen last year 1848 on the Rio Grande climbing 10-20 ft.

837. Eriogonum abertianum — hills beyond the Pecos

838. Nyctaginac. (Selinocarpus diff.) — " " "

839. Compositae — " " "

840. Tidestromia — " " "

841. Larrea — " " " 3-4 ft. tall, fl. yellow

842. Oenothera — " " "

843. Euphorbia — 20 mi. beyond the Pecos

844. Suaeda Chenopod. — valley 20 mi. beyond the Pecos — Aug. 17, 1849

845. Asclepias — " " " " — Aug. 17, 1849

846. — " " " "

847. Heliomeris — " " " "

848 Solanaceae — " " " "

849. Melampodium — prairies 30 mi. beyond the Pecos — Aug. 18, 1849

850. Suaeda Chenopodiaceae — salt-flat 40 mi. beyond Pecos

851. Cnicus — valley 30 mi. beyond Pecos, fl. purple

852. " undulatum — margin of creek about 30 mi. beyond Pecos, fl. purp., 3-4ft tall

853. Eriogonum Tridentatum — hills about 30 mi. beyond Pecos

854. Compositae — valley about 40 mi. beyond Pecos

855. Solidago — hills about 40 mi. beyond Pecos

856. Compositae — valley about 40 mi. beyond the Pecos.

All in Pecos County, almost certainly.
collections within Jeff Davis Co probably begin with those of Aug. 22 (nos ~~816~~ 887 et seq.)

887

The party camped at Comanche Springs (the present Fort Stockton) on ~~Aug~~ Sept. 19th, about ~~46~~ 46 miles from the Pecos.
The ~~camped~~ on ~~Aug~~ Sept. 20th at Leon Springs 10 mi. west of Comanche Spr.

On the 21st. the party went into camp somewhere not far from the present Barilla Spring, 35 mi. ~~west, about~~ west of Leon Spring, at the opening of the wide valley down which the Limpia Creek intermittently flows to join a north-flowing tributary of the Pecos. At this place a large number of plants were collected on Aug 21st.

The official distance given by the party betw. Leon Spr. and the first water on the ~~Limpia~~ Limpia is 35 miles
Leon Spr. according to party is 55.86 mils from the Pecos.

Beyond Comanche Spr., acc. to French p.47, "The next watering place is the Ojo de Leon. The country between the two places is extremely sterile. The water rises to the surface from out of springs, 30 to 40 ft. in diameter, that sink to a great depth, like wells. The water runs from one spring to another, and finally in the course of a half mile, sinks into the earth."

"Quitting Ojo de Leon, the road still continues over a dreary, barren country, without timber or grass, until it enters the valley of the Sierra Diablo (i.e Davis Mts). The general features of the country now change; mountains rise on right and left; the limestone formations has generally disappeared; and the hills wear a sombre appearance, from the dark rocks of primitive formations. The distance from the Ojo de Leon to the Limpia is nearly 40 miles; and no water intervening can be relied on, though at certain seasons it may be found. At the point where the road strikes the Limpia, it is a small stream, rising from its rocky bed, and, flowing a short distance, soon disappears..... Leaving the valley, the road enters Wild Rose pass. Few places can present anything more lovely than this little valley, surrounded as it appears to be by a wall of vertical rocks, rising a thousand feet in altitude... From here the road leads over a spur of the mountain, and descends on the other side, and, continuing up the bed of the stream several miles, through a deep, narrow canyon, leads to a more elevated plain, in which this little stream takes its rise. This canyon is some places is not more than two hundred yards width." French, pg. 47

i.e to

857. Compositae prairies about 40 mi. beyond the Pecos August 18, 1849

858. Gaillardia " " 40 " "

859. Gaura " " 60 " " Aug. 20, 1849

860. Cassiae sem. " " 60 " "

861. Vernonia valley about 80 mi. beyond the Pecos Aug. 21, 1849
fl. purple

862. Salvia valley about 80 mi. beyond Pecos

863. Eriogonum Wrightii hills about 80 mi. beyond Pecos

864. Dalea " " "

865. " " " " fl. yellow

866. Compositae " " " fl.ligut purp. labiatiflorae

867. Dalea citae " " " fl purple

868. Compositae " " " fl. yellow

869. Malvaceae Valley about 80 mi. beyond Pecos — Probably S. lepidota var sagittaefolia type dupl. no. 47 — but local. given as "60 mi"

870. Dichondrae hills about 80 mi. beyond Pecos

871. Compositae valley about 80 mi. beyond Pecos.fl. yellow

872. " " " " "

873. Eysenhardtia bed of creek 80 mi. beyond Pecos

874. Gnaphalium " " " " " "

875. Gaura valley 70-80 mi. beyond Pecos

876. Compositae " " "

877. Aplopappus " " abundant

878. Senecio plains " " fl. yellow

879. Asclepias " " " fl. purple

880. Gaura " " "

881. Gnaphalium bed of creek 70-80 mi. beyond Pecos

882. Euphorbia " " " "

883. Scrophulariac. " " " " fl. yellow

884. Eriogonum? hills 70-80 mi. beyond Pecos

885. Cruciferae Hymenopappus pubens Torr. & Gray pond in valley about 80 mi. beyond Pecos

886. Compositae valley about 80 mi. beyond Pecos

Until about the 29th the party was in Jeff Davis County

The stream bed of the Limpia was struck about 15 miles up the valley on Aug. 21st. and they then continued up the stream until they reached the Canyon and Pass of the Limpia (~~Wild Rose Pass~~) in the Davis Mts. Thru this pass they travelled from the 24th to the 26th. On the 26th the train left the Limpia Pass and during the next two days passed an immense prairie-dog town as they skirted the southern edge of the Davis Mts. on their way to the Van Horn Flats.

887. Cyperac. bed of the Limpia or Wild Rose Creek, wet August 22, 1849

888. Lobelia " " , fl. deep purple

889. Eryngium " " , fl. light blue, basal leaves subpectinate

890. Coreopsis " "

891. Actinella " "

892. Cyperus " "

893. Sporobolus arenacea Gramineae " "

894. Salix " " , 8-10 ft. tall

895. Baccharis " " , 5-5 ft. tall, fl. white

896. Rumex " "

897. Panicum Echinochloa crus-galli " "

898. Aster margin " , 2 ft. tall, fl. purp.

899. Salix " " , 6 ft. tall

900. Cyperus " "

901. Leguminosae valley of the Limpia , fl. purp., trailing 6-8 ft.

902. Sidalcea " " , sandy soil

903. Violacea " " , fl. purple

904. Cruciferae " " , fl. purple

905. Gramineae " "

906. Muhlenbergia " "

907. Penstemon seeds " "

908. Compositae " "

909. Aristolochia " " , fl. purple

910. Engelmannia " " , rays with purple vein beneath

911. Euchroma " "

912. Scutellaria " " , fl. deep purple

913. Compositae " " , fl. white

914. Evolvulus " " , fl. purple

915. Compositae " " , fl. purple

All Jeff Davis County

916. Galium bottom of the Limpia Aug. 22, 1849

917. Aster " " , fl. white

918. Cyperac. " "

919. Asclepias valley "

920. Eriogonum polycladon bottom "

921. Nyctaginac. Oxybaphus valley " , fl light purple

922. Compositae " " , fl. white

923. Polygala " " , fl. purple Aug. 23, 1849

924. Gaura " " , fl. pink

925. Phlox " " , fl. scarlet

926. Compositae " " , fl. purple

927. " " " , fl. purple

928. Nyctaginac. Acleisanthes longiflora " , white, turning black on drying

929. Boerhaavia gracillima hills " , fl. scarlet

930. Galactia " " , fl. purple

931. Eriogonum tenellum " , fl. white

932. Gaillardia valley of the Limpia

933. Gramineae Leptoloma " "

934. Hosackia? " " , fl. yellow

935. Eriogonum " " , fl. white

936. Quercus foot of hills on the Limpia, 8-10 ft. tall

937. Convolvulus Valley of the Limpia, fl. bluish-purp., climbing over bushes

938. Vernonia " " , fl. purple

939. Sidalcea " " , fl. vermillion-red

940. Eutoca hills near the Limpia, rock-crevices, fl white Aug. 23, 1849

941. Filix Woodsia mexicana " " "

942. Filix Cheilanthes Eatonii " "

943. Physalis valley of the Limpia

944. Cyperac. " " "

945. Aplopappus " " "

All are in Jeff Davis County

946. ---- Valley of the Limpia April 23, 1849

947. Gramineae " "

948. Solidago " " in thick bunches

949. Dalea " " fl. deep scarlet

950. Ambrosia? " "

951. Compositae " "

952. Convolvulus " " fl. purple

953. Epilobium? margin of the Limpia , fl. light red Aug. 24, 1849

954. Salvia " " " , fl deep blue

955. Solidago valley of the Limpia , dense bunches

956. compositae " " " , sandy soil, 3-5 ft. tall

957. Pentstemon " " "

958. Portulaca hillsides near the Limpia

959 Solidago " " "

960. Compositae " " "

961. fern " " "

962. fern " " "

963. Bidens " " " , 2-3 ft.tall,rays white or yellow light

964. Ranunculus margin of the Limpia, spreading 2-3 ft.

965. Solidago valley of the Limpia

966. Malvaceae margin of the Limpia, 2-4 ft. tall, fl. purple

967. Commelyna " " " ,fl. blue, lower petal large for genus

968. Rosa arkansana bottom of the Limpia, 2-3 ft. tall

969. Gramineae Andropogon valley of the Limpia dense bunches

970 fern hillsides, valley of the Limpia

971. ---- In Pass of the Limpia, side of hills

972. Gramineae Muhlenbergia " " " "

973. Bignoniac. " " " " , 2-3 ft., fl. light yellow

974. Malvaceae " " " " , fl. light purple

975. Liatris " " " "

All are in Jeff Davis County

August 24, 1849

976. Dalea fruticosa side of hill in Pass of the Limpia, 1 ft. tall, fl. purple

977. Composit " " " , fl yellow

978. Gramineae Andropogon scop. " " , in dense bunches

979 "Eliomurus" " "

980. fern " " "

981. Leguminosae Lucaena retusa " " , 3-5 ft. tall

982. Nyctaginac. " " "

983. Dalea " " " , fl yellow

984. Martyniac. prairies in mountain valley, fl. purple

985. Labiatae " " " " "

986. Dalea Hills Pass of the Limpia fl. purple

987. gramineae Lycurus prairies, Pass of the Limpia

988. Salix. margin of the Limpia

989. Hymenatherum prairies, Pass of the Limpia

990. Compositae Pass of the Limpia mountain-side in rock-crevices

991. --- Pass of the Limpia, mountain-side August 25, 1849

992. Oenothera margin of the Limpia, fl. yellow, turning reddish, vespertine

993. fern Pass of the Limpia, top of mountains

994. Cruciferae Pass of the Limpia, top of mountains

995. Rhus " " " " , fl. white

996. fern Gymnogteris lingida Type Pass of the Limpia, on mountains in rock crevices

997. Eriogonum " " " " " "

998. Micromeria? " " " " " " fl. blue

999. Galium " " " " " " fl. red

1000. " " " " " " " fl. yellow

1001 Crucifer " " " " " " fl white

1002. Muhlenbergia? Pass of the Limpia, summit of hills

1003. Asclepiad. " " , valley prairies

1004. Cyperaceae in the Limpia Aug. 26, 1849

1005. Gramineae bottom of the Limpia

All are in Jeff Davis County

"The first encampment on the plain is called the Painted Camp. Gramma grass is abundant, and wood plenty. The Limpia here, though near its source, affords more water than where it was first met, thirty miles below.....From Painted Camp, the road continues over the plain, and is remarkably good. For several miles it runs through a prairie dog town,,,,,, By the road side, 15 mi. distant, beneath a large boulder of granite, water may be found; but it was unfit for use when we passed it, having been completely trodden up with mud by the animals of the advanced train. The first reliable water is at Smith's Run, 26 mi. from the Limpia. The last six miles of the road runs on ground covered with small angular fragments of rocks, rendering it very rough. The creek is found in a ravine at the base of a very high range of mountains on the right; and to reach it, the road turns off the direct course near two miles.... Continuing along the base of these mountains, water is again found in some springs 10 mi. distant. But from here to Eagle Springs, a distance of 60 mi., no certain or living water is found, though there are some intermediate ponds, and Rain Water Creek, 20 mi. distant, is sometimes swollen to a stream of considerable size. Between these points the country is mostly an elevated plain. The road, leaving the mountains on the right, passes over to the range on the left. .... Eagle Springs are found in a ravine formed by spurs of the mountains. Although the precaution was taken to march the train in four divisions, each on 4 consecutive days, yet water was not found sufficient for one-third of the animals; consequently, they had to march 70 miles (i.e from Smiths Run to Eagle Spr,) without water." Capt. French's report, pg.48.

French, p. 51-52, gives the milage between the following points (haulting pointsor camp-sites) between Leon Springs and the Rio Grande,-

Leon Springs - 37 mi.- Limpia - 6.97 mi. - Entrance to pass - 4.5 mi. - Camp in small valley - 14.08 mi.- Painted Camp - 26.33 mi. - Smith's Run - 9 mi. - Springs - 17.82 mi. - Rain Water Creek - 18.77 mi. - Water-holes - 21.57 mi. - Eagle Springs - 22.61 mi. - Entrance of canyon - 8.81 mi. - bank of Rio Grande.

= Fort Davis

Wright probably left Painted Camp on August 26th and went to Smiths Run.

The 27th he probably moved on to Rain Water Camp and next day got to VanHorne Wells.

1006. Gramineae (Panicum plenum) bottom of the Limpia — Aug. 26, 1849

1007. "Aristida" " " "

1008. Calliandra Pass of the Limpia, valleys betw. mountains, in fruit only

1009. Asclepias " " " " "

1010. Clematis " " " " " spreading 3-5 ft.

1011. Acacia? " " " " " 3-4 ft. tall

1012. Leguminosae " " " " " 2-3 ft. tall

1013. Amaryllidaceae (Amarcrinum Tampi) " " " " " fl. yellow

1014. Calliandra ? " " " " " fruiting only

1015. Gramineae (Aristida) Mountain valleys beyond the Limpia Pass

1016. Panicum

1017. Eriogonum Wrightii

1018. Desmanthus

1019. Physalis

1020. Leguminosae

1021. Hedyotis fl. white

1022. Cruciferae

1023. Nama (hispidum) fl. red

1024. Compositae

1025. Euphorbia

1026. Scrophulariac. side of mts. beyond Limpia Pass

1027. Boraginaceae mt. valleys beyond Limpia Pass

1028. Leguminosae branching& spreading, 2-3ft.

1029. Compositae in dense bunches

1030. Leguminosae much spreading, 2ft. high

1031. Asclepiad.

1032. Physalis fl. purple

1033. Gaura

1034. Compositae

1035. Polygala fl. light red

Jeff Davis County

Painted Camp, the camping place at the head of the Limpia, is a mile or two above present, Ft. Davis. The road to El Paso goes west along the south base of the Davis Mts (passing the prairie Dog town) to Smiths Run (or Rock Creek) which is 18 mi. east and a bit south of Valentine (U.S.G.S Valentine quad.)

From Smiths Run or Rock Creek the road turns northwesterly, along the west side of the Davis Mt. mass, to the base of El Muerto Peak, where, 9 mi. from Smiths Run, springs are found. These are somewhere near "Moore's Ranch" shown on the USGS Valentine quad.

From the springs near Moores Ranch the road, leaving the mass of Davis Mts, runs a bit north of west 17 miles to a south-flowing tributary of Chispa Creek (5 mi. north, and a bit west of Wendell). This is Rain Water Cr. (On the USGS. Chispa quad. this stream is unnamed).

From Rain Water Creek, continuing a bit north of west, to the base of Chispa Mt. and then skirting the peak (and entering Culberson County) crossed Chispa Creek (Providence Creek of old maps) and went north to Van Horne Wells ($9\frac{1}{2}$ miles south of present town of Van Horne). RainWater Cr. to VanHorne Wells is about 18miles. The road left Chispa Creek 8 miles south of VanHorne Wells.

The above route is closely followed by an auto road which leaves the VanHorne-Marfa highway near the Culberson-JeffDavis county-line and goes to Ft. Davis.

The collections of Wright, labeled "mountains towards the Rio Grande" (nos. 1059-1093) were probably collected after passing Chispa Mt. and Chispa Creek, and hence from what is now Culberson County. Previous to reaching Chispa Cr., after leaving the Limpia, they had kept the main mass of mountains on their right (i.e north of them) but after crossing the Chispa the mass of mountains were those along the Rio Grande and were on their left (i.e. west and south of them). This would suggest that Wright camped at VanHorne Wells the night of August 28th, 29th and 30th.

Van Horn Wells is just west of Lobo siding on the railroad.

1036. Leguminosae mountain valleys beyond Limpia Pass Aug. 26, 1849

1037. Gramineae hills beyond Limpia Pass Aug. 27, 1849

1038. " Arrolida

1039. "

1040. "

1041. Dalea frutescens

1042 omitted

1043. Compositae fl. yellowish

1044. Convolvulus fl. purple

1045. Cryptantha valleys among hills beyond Limpia Pass

1046. Bolivaria hills beyond the Limpia Pass fl yellow

1047. Croton valleys among hills beyond Limpia Pass

1048. Eriogonum " " " "

1049. Dalea mountains beyond Limpia Pass August 28, 1849

1850. Senecio " " " "

1051. Artemisia " " " "

1052 Quercus grisea " " " "

1053. Gnaphalium " " " "

1054. Gramineae Setaria (No 799) mountain-tops beyond Limpia Pass

1055. Compositae mountains beyond Limpia Pass, dense bunches or branched from the root, fl. yellow

1056. Amaryllidac. (Echeveria strictiflora Nob.) mt. beyond Limpia Pass, fl scarlet

1057. Gramineae " " " , in dense tufts

1058. Labiatae " " "

1059. Gramineae Hilaria valleys among mts. towards the Rio Grande

1060. Scrophulariac. hills towards the Rio Grande, branching from ground

1061. Pinus mountains towards Rio Grande 10-20 ft. tall Aug. 29, 1849

1062. Galium " " "

1063. Malvaceae " " " , fl. light purple

1064. Talinum " " " , fl. yellow

1065. Apocynaceae " " " , fl white

9½ miles due south of present town of V. Horn at NE base of Van Horn Mts.

The party followed the Van Horn trough up the Wildhorse Creek perhaps hitting that stream at or north of Valentine and then went to Van Horn Wells (near present Van Horn, Culberson County). They then struck west to Eagle Springs (~~a few~~ 8 mi S and a bit E. of Eagle Flats on R.R. ~~miles south of the present town of Eagle Flat at the base of the Eagle Mts.~~) within Hudspeth County.

In passing from Jeff Davis County to Hudspeth Co only about 30 miles were spent within the present Culberson County.

According to the official report of the party the distance between Eagle Springs and the Rio Grande is a bit over 30 miles. From the well east of Eagle Springs (i.e. Van Horn Wells) to ~~Eagle Spr~~ ~~the distance is about 22 mile~~. to Eagle Springs the distance is given as about 22 miles.

Wright was probably collectiong about Eagle Springs, Hudspeth Co., on Sept. 1, 2, and 3.

On Aug. 30th. (29th) he may have been collecting near Van Horn Wells, Culberson Co.

Van Horne Wells is 9.5 miles due south of the present town of VanHorne and are at the northeast base of the VanHorne Mts. Culberson Co.

Eagle Springs are at the northern end of the Eagle Mts and are 8 miles south and a bit east from the town of Eagle Flats on the railroad. They are west of VanHorne Wells, and are in Hudspeth County

1066. --- mountains towards the Rio Grande Aug. 29, 1849

1067. Compositae

1068. Solidago

1069. Convolvulus fl. red

1070 Gramineae Muhlenbergia Emersleyi

1071. Paronychia Aug. 30, 1849

1072. -- , shrub 5-8 ft tall

1073. Nyctaginac. (Mirabilis Wrightiana)

1074. Houstonia mountain valleys toward the Rio Grande, fl. white

1075. Actinella? orBailleya Mt. valleys towards the RioGrande
rays in several series

1076. Senecio valley towards the Rio Grande, smooth variety

1077. Cucurbitac. , fruit $2\frac{1}{2}$ X $3\frac{1}{2}$ in. diam.

1078. Dalea , fl yellow

1079. Euphorbia

1080. Malvaceae , fl. red

1081. Nyctaginac. Allionia incarnata

1082. Cruciferae

1083. Eriogonum rotundifolia

1084. Gaura

1085. Compositae , only one specimen found

1086. --- Guillemina mt. valleys towards the Rio Grande,

1087. Compositae mt. valleys towards Rio Grande, only one specimen seen

1088. " " " " "

1089. Dichondra ! mountains enclosing the above valleys

1090 ---- " " " "

1091. Nyctaginac. Bocharavia mountain valleys towards Rio Grande, fl pink

1092. Compositae " " " "

1093. Oenothera " " " "

1094. Cruciferae " " " " ,fl. white, Sept. 1, 1849
30-40 miles from Rio Grande

Leaving Eagle Springs the road bore to the left between the Eagle Mts. and Devils Ridge and crossed the present Quitmann Arroyo. About 23 miles from Eagle Spr. the road entered a deep rugged canyon in the Quitman Mts. by which after a course of 8 or 9 miles ~~the party of~~ the Rio Grande was reached, opposite the present town of La Banderas, in Mexico across the river. This is all in Hudspeth County.

From this point the party ascended the valley of the Rio Grande to ElPaso, over 80 miles.

Collections of Sept 7th (and perhaps those of the preceeding day) probably were obtained in what is now El PasoCounty, Texas

(The party hit the Rio Grande 6 miles below old Ft. Quitman)

1095 Solidago - - - - - Sept. 1, 1849

1096. Vernonia margin of Greek 30-40 miles from Rio Grande

1097. Paspalum distichum " " " " " " , dense patches

1098. Mentzelia mountain valleys 30-40 mi. from RioGrande , fl light yellow

1099. Compositae " " " " " much branched damp sandy soil.

1100. Heliotropium Greggii mt. valleys 30-40 mi. from RioGrande fl. white or light purple

1101. Compositae. mountain branch 35 mi. from Rio Grande rocky banks Sept. 2, 1849

1102. Malvaceae declivity of hills 30-40 mi. from Rio Grande

1103. Muhlenb. arenacea Gramineae mountain valleys 30-40 mi. from Rio Grande , sandy soil

1104. Portulaceae " " " "

1105. Allionia incarnata Nyctaginac. " " " "

1106. Coldenia hispidissima mt. valley 30-40 mi. from Rio Grande

1107. Gilia tenuiflora Phlox? mountain valley 30-40 m. from Rio Grande Sept. 3, 1849

1108. Allionia angustifolia var. texana Nyctaginac. " " "

1109. Compositae " " "

1110. Polygala " " "

1111. Leguminosae " " "

1112. Ambrosia " " "

1113. Sida " " "

1114. Gramineae ~~Stipa~~ " " "

1115. Talinopsis frutescens nov. mt. valleys 17 mi. from Rio Grande, fll purple

1116. Crucifer valley of a branch 10 mi. from Rio Grande, fl white

1117. Euphorbia mountain valley 25mi. from Rio Grande

1118. Compositae hillside 15 mi. from Rio Grande

1119. " mountain valley 15 mi. from Rio Grande , sandy soil

1120. Gramineae " " " "

1121. Compositae damp valleys 15 mi. from Rio Grande

1122. Cruciferae Rio Grande valley 60-70 mi. below El Paso 2-3 ft. tall, fl. white Sept 4, 1849

Wright seems to have estimated the distance from El Paso, at which the party first struck the Rio Grande, as 60-70 miles. The real distance is about 80 miles by auto road and also by army measurements of the old wagon road.

French, pg 52, gives the measured distances for the expedition as follows,-

Eagle Springs - 31.42 mi. - Rio Grande - 54.84 mi. - lower ford of Rio Grande - 5 mi. - San Elizario - 5.45 mi. - Socorro - 3.10 mi. - Isleta - 7.05 mi. - upper ford of Rio Grande - 7.09 mi. - Coon's Hacienda (El Paso)

about present day town of Guadalupe

54.84
5.45
3.10
7.15
7.09
miles 82.53 from first point on Rio Grande to El Paso acc to French measurement

22 mi San Elizario to El Paso (not French)

acc to Emory distance from San Elizario to last camp on Rio Grande = 59.8 mi.

1123. Cyperaceae Rio Grande Valley 60-70 mi. below El Paso Sept. 4, 1849

1124. "

1125. ----

1126. Compositae

1127. --- , river-bottoms

1128. Portulaceae , river-bottom, fl. small yellow

1129. Gramineae

1130. ~~Portulaceae~~ Tiquilia canescens , river bottom fl. purple

1131 ~~---~~ Atriplex expansa , gravelly ridges

1132. Coldenia hispidissima , fl. purple

1133. Solidago

1134. Gramineae Trichloris , bottoms

1135. Cyperaceae , overflowed bottom

1136. Nyctaginac. Selinocarpus chen. , pebbly hills fl. purple

1137. Gramineae , bottoms

1138. " Eragrostis neomexicana , "

1139. " , "

1140. Portulaceae ~~Portulaca~~ retusa Eng. , fl. yellow minute, sandy Sept. 5, 1849.

1141. Cyperaceae

1142. Dieteria? edge of overflowed bottom of Rio Grande 60-70 mi. below El Paso, fl. purple

1143. Poa Eragrostis pectinacea valley of Rio Grande 60-70 mi. below El Paso

1144. Sagittaria overflowed bottoms, Rio Grande 60-70 m. below ElPaso, flwhite.

1145. Aster valley of RioGrande 60-70 m. below ElPaso

1146. Mammillaria fl pink or light purp.

1147. Aplopappus

1148. Dieteria

1149. Dalea sandy ridge, purple

1150 Solidago much branched from root

1151. Dichaetophora? fl. light purple

1152. Oenothera sandy soil fl.light pink, verspertine

Wright's "40-60 mi below El Paso" is ~~half way betw.~~
~~first point on Rio Grande and El Paso~~
near old Ft Hancock or a few miles below

1153. Helianthus valley of Rio Grande 60-70 mi. below ElPaso Sept. 5, 1849
3-4 ft. tall

1154. Dieteria(equals 1148?) abundant

1155. Galardia sandy soil

1156. Gramineae Sporobolus cryptandrus

1157. Scrophylar.

1158. Palafoxia

1159. Cuscuta Rio Grande Valley 40-60 mi. below ElPaso Sept. 6, 1849

1160. Dieteria , Aster?, low ground

1161. " ? , " "

1162. Gramineae

1163. " Aristida

1164. Martynia , sandy ridges, fl. yellow

1165. Hymenopappus

1166. Gilia , sandy ridges, fl. white

1167. ~~---~~ Acanthochiton Wrightii Torr.

1168. Malvaceae Sida hederacea distr. no. 46 , expanded fl pale yellow
low bottom

1169. Capsella , high & low ground, abundant
fl. white

1170. Portulaceae [illegible] , bottom, fl deep red

1171. Gramineae , on sandy ridges

1172. ~~---~~ Atriplex canescens , fl. not seen

1173. Leguminosae , 8-12 ft., fl. yellow

1174. Physalis , low bottom Sept. 7, 1849
fl. dull yellow

1175. ~~---~~ Atriplex acanthocarpa Rio Grande Valley 25-30 mi. below El Paso, 1-2 ft. tall

1176. Compositae , bottoms

1177. Aster spinosus

1178. Lepachys

1179. ~~---~~ Atriplex acanthocarpa

1180. ---- , low bottom

1181. Compositae

~~1182~~ Aster

1182. Aster Rio Grande Valley 25-30 mi. below El Paso, bottom Sept. 7, 1849

1183. Leguminosae overflowed bottom and sandy valley ofbthe Rio Grande
fl. deep purple, very much branched Sept. 8, 1849

1184. Abronia Torreyi
Nyctaginac. Rio Grande Valley 8-10 mi. below El Paso, sandy, fl. pink

1185. Panicum Rio Grande Valley 5 mi. below ElPaso, low bottom Sept. 9, 1849

1186. Chenopodium Fremontii
Chenopodiaceae " " "

1187. Heliotropium convolvulaceam " " " , sandy soil, fl white

1188. Capparid. " " " , Wislizenia, 1½-2½ ft
fl. yellow

1189. Datura " " " , low bottom, 1-2 ft.,
fl. light purp., much branched and spreading, Sept. 11, 1849

1190. Pellaea intermedia var
fern Mountain side near El Paso, Sept. 12, 1849

1191. Gramineae summit of mt. near El Paso

1192. " " " "

1193. Artemisia Rio Grande valley 5 mi. below El Paso, much branched, 3-5ft.

1194. Compositae " " "

1195. Malvaceae mt.-side near El Paso , fl. light purp., much branched
from root

1196. Compositae

1197. Senecio , much branched, 1-2 ft tall

1198. Euphorbia

1199. -----

1200. Polygala , fl. purple

1201. Gramineae

1202. Compositae

1203. Gramineae Sporobolus

1204. Quercus pungens , 5~~0~~7 ft. tall

1205. Oxybaphus
Nyctaginac.

1206. Solidago

1207. fern

1208. Artemisia

1209. Mentzelia Valley of RioGrande, sandy soil, fllight yellow, vespertine

1210 Tradescantia Wrightii Rusby Bull
Tradescantia summit of mountains near ElPaso, fl purp.

1211. Malvaceae mts. near ElPaso, declivity Sept. 12, 1849

1212. Chrysopsis summit & sides, much branching & spreading

1213. Capparidac. " "

1214. Sidalcea slopes, 2 ft. tall

1215. Salvia , summit & sides, fruticose, 1-4 ft. tall
corolla & calyx purple

1216. Eriogonum? , declivity

1217. Physalis " , fl. dull yellow

1218. Phaseolus " , fl purple

1219. Compositae " , in rock-crevices

1220. Euphorbia " "

1221. Garrya? " " , 6-19 ft. tall, in fruit

1222. Viscum " , on small sp. of oak, 6-8 ft high

1223. Nyctaginac. " , in shade, procumbent

1224. Gramineae " "

1225. Helianthus "

1226. Solidago " , much branched from root

1227. Convolvulus ", climbing, fl. purple

1228. Cactus declivity of mountains near ElPaso, ~~fr. scarlet~~ Sept. 16, 1849

1229, " , fruit scarlet

1230 "

1231 " , fl. pink

1232. "

1233. " , fruit scarlet

1234 "

1235. "

1236. "

1237 ----

1238. Scrophulariac. bottom of RioGrande near Presidio da San Elizario
or Pres. de Bejas Sept. 17, 1849

Sept. 17, 1849

1239. Compositae "margin of ditches a Secoro" [Socorro on the RG?]
$1\frac{1}{2}$-3 ft, high, much branching, fl. yellow

1240. cactus declivity of mountains near ElPaso

1241. Cactus-fruit from plant up to 3 ft tall & $1\frac{1}{2}$ in. diam., horridly spinose fruit entirely covering the summit, fl. yellow

1242. Malvaceae fields at Presidio de San Elizario, introduced?
fl. purple Sept. 18, 1849

1243. Heliotropium curassavic. Presid. S. Elizario, roadside, fl white

1244. Datura road side at Presidio de San Elizario, fl purple

1245 Ambrosia fields at Presid. S. Elizario

1246, (Granthema Portulaca fields at Pres. de S. Elizario

1247. Compositae RioGrande valley at Pres. S. Elizario, sandbank Sept.22,1849

1248. Aster low wet land, fl. purp.

1249. Dretina? " " "

1250. --- in water, fl. deep purp.

1251. Plantago low grounds along ditch

1252. -- sandy soil

1253. Aster

1254. Sagittaria in ponds

1255. Dalea? in fields, introduced?, fl. white & purple

1256. Sagittaria in water

1257. Leguminosae old field, introduced? (alfalfa sp.)

1258. Dietina on sand-bars

1259. Verbena bottoms

1260. Solanaceae bottoms, fl. purple

1261. --- Pres. de S. Elizario, border of fields, fl. purple Sept. 24, 1849
(quiotic sp)

1262 Mentha margin of aqueduct, Pres. S. Elizario, fl white, introduced?, 2-3 ft. tall Sept. 25, 1849

1263. Ambrosia Pres. S. Elizario, abundant in fields

1264. Gramineae Pres. S. Elizario, one specimen in field Sept. 26, 1849

1265. Nicotiana " " in field

1266. Composite " " , Rio Grande bottom, low land

Socorro , Ysleta and San Elizario are towns along the Rio Grande below El Paso. All are on modern maps and all are in El Paso County within 20 miles of El Paso.

1267. Gramineae Presidio de San Elizario, irrigated bottom of R.G. Oct.1,1849

1268. Compositae " " "

1269. Cyperac. " " field

1270. Salvia " " " , fl. blue.

1271. --- valley of the RioGrande near Pres.S. Elizario Oct. 4, 1849
1-2ft.tall, erect or procumbent, saline

1272. Salicornia? valley near Pres. S. Elizario, dense bunch, 2-3ft.tall

1273. Crotalaria fields near Pres.S.Elizario & ElPaso, introduces, Oct. 5,1849
fl. deep yellow

1274. Gnaphalium RioGrande valley near Socorro(Manzanlla del rio Sp)

1275. Gramineae pebbly hills near El Paso Oct. 7, 1849

1276. " " " "

1277. --- " " "

1278. Nyctaginac. " "

1279. Senecio Rio Grande bottom below El Paso

1280 Heliotrop. Greggii " " " " , flwhitewith greenish-yellow base

1281. Aplopappus " " " "

1282. Bidens Isletta, edge of field, 4-6 ft. tall, much branched

1283. Gilia? hills near El Paso, fl. bright red

1284. Compositae " " , fl. white, plant 6-12 in. tall

1285. Hymenatherum " "

1286. (Yerba de la tortola Sp) hills near ElPaso Oct. 8, 1849

1287. Sidalcea " " "

1288. Dalea mointains near ElPaso fl. yellow

1289. Compositae " "

1290 Euphorbia

1291. -- mountain-ravine near El Paso, fl. purple

1292. Portul. or Crassulac. summit of mountains near El Paso
fl. light red nearly white

1293. Polygala summit of mts. near El Paso

1294. Amaranthac. Rio Grande valley near ElPaso Oct. 11, 1949

The party is reported as beginning its return on Oct. 11th. They took the northern route which goes due east and slightly north from El Paso, cutting thru the southern end of the Guadalupe Mts, and then along Deleware Creek until it joins the Pecos. "But in the middle of October the winter set in with such severity that I though the lives of our mules depended on our turning southward. The men also were equipt for summer. Therefore instead of crossing the Pecos we marched down it to the southern road [the one which they had used on the out trip] which was followed to San Antonio where the party arrive the 23rd of November," 1849.

ex. J.E. Johnston report p. 27 Sen. Exec. Docs no 64 p 27

The report gives Hueco or Waco Tanks (in the Hueco Mts. on the ElPaso-Hudspeth countyline) as about 30 miles from ElPaso

Collections of Oct. 12th are probably El Paso County

Those thru the 15th probably in ~~Hudspeth Co.~~ southern New Mexico Hudspeth

Those until ~~October 20th are in northern Culberson Co.~~

Between Oct. 21 and Nov. 2nd the party was in the Pecos Valley in Reeves, Pecos and Crockett counties

16th

Oct 16 to 20 Culberson Co

should this be "35" →

should this be "50" →

1295. Composite prairies east of El Paso, shrub 2-5ft tall Oct. 11, 1849

1296. Martynia Rio Grande valley near ElPaso, fl purple

1297. ---- prairie 6-30 mi. east of El Paso, suffruticose Oct. 12, 1849
much branched, 1½-3 ft. tall

1298. Composite , prairie 6-30 mi. E. of ElPaso, 3-4 ft. tall

1299. Leguminosae " " " "

1300. Compositae " " " "

1301. Scrophulariac prairie 25 mi. E. of ElPaso, fl yellow, much branched

1303. Labiatous mountain valley 30 mi. east of El Paso, under rocks at base of mts., 1-2 ft. tall

1302 Helianthus mt. valley 30 mi. E. of ElPaso, branched 2-3 ft. tall

1304. Helianthus " " "

1305. Desmodium " " "

1306. Cassia " " " , fl small yellow

1307. Gramineae " " " (no. 806)

1308. Mentha " " " , fl. white

1309. Composite mt. valley 35 mi. E. of ElPaso Oct. 13, 1849

1310. Quercus " " " large spreading tree 12-30ft.

1311. Galactia " " "

1312. Solidago " " "

1313. Compositae " " " , much branched

1314. Convolvulus " " "

1315. Gnaphalium " " "

1316. Salvia mt.-branch 40 mi. E of El Paso , fl scarlet Oct 14, 1849

1317. Gramineae " " "

1318. Hymenatherum " " " , abundant

1319. Compositae " " " , much branched, 4-5 ft. tall

1320. Saxifragaceae crevices of rocks on mountains east of El Paso, fl. whitish, spreading in flat patches 1-3 ft. broad

1321. ---- on rocks in mountains east of El Paso, presented by Col. Johnson, odorous when fresh

30 mi by highway to Hueco Tanks from El Paso

120 mi by highway, El Paso to Pine Spgs.

Oct 11 leave El Paso — real distances

12 to Hueco Tanks. — 6-30 mi

13 around Hueco Mt. (=Cerro Alto) — 35 mi

14 Ojo Alamo — (50-55 mi)

15 Cornudas — (60-65 mi)

Oct 16 Crow Spgs & beyond — (70 mi)

17 } to Pine Spgs — (120 mi)
18

19 [illegible]

20

21

22

23

24

25 Pecos Valley.

[illegible] reached Live Oak crossing [illegible] on San Ant.-El Paso Road.

Oct. 14, 1849

1322. Nyctaginae, at the foot and in the shade of high rocks, fl. purple

1323. Oplotheca? [Froelichia] sides of the Guadalupe Mts. , fl yellow Oct. 15, 1849

1324. Compositae sides of Guadalupe Mts., 40 ? mi. E. of El Paso, 1-2 ft. tall

1325. ---- salt plains at western base of Guadalupe Mts. Oct. 16, 1849

1326. Senecio " " "

1327. Cruciferae [Erysimum] sides of Guadalupe Mts. , fl yellow

1328. Compositae plains at base of Guadalupe Mts,

1329. " banks of a dry creek at Guadalupe Mts.

1330 " near a fine spring in plain at [east] base of Guadalupe Mts.

Oct. 18, 1849

1331. " " " " "

1332. Solidago " " " "

1333. Aster " " " "

1334. Hymenatherum rocky bank of creek east of Guadalupe Mts in large bunches - also on the Pecos

1335. " data as with last, only a few specimens seen.

1336. Mentzelia plain at eastern base of Guadalupe Mts

1337. cedar [Juniper] Guadalupe Mts.

1338. Oenothera

1339. compositae plain at eastern base of Guadalupe Mts.

1340. Salvia , fl blue

1341. Baccharis banks of creek tributary to the Pecos, 3-4ft. tall Oct. 20, 1849

1342. Compositae " " " "

1343. Gramineae " " " , 6-8ft. tall

1344. ---- plains betw. the Guadalupe Mts & the Pecos

1345. Mentzelia " " " " "

1346. Gramineae Valley of the Pecos, in bunches, abundant Oct. 25, 1849

1347. " "

1348. " "

1349. " " "

"

Oct 25 [illegible] Delaware Cr in Pecos R.

26

27

28

29

30

31

Nov. [1]

2 Live Oak Cr (Crockett Co?)

3 [illegible] Cr (? Howards Spr?)

4

5 [illegible] Pecos R. (Val Verde Co?)

6

7 Devils River

1350. Gramineae Valley of the Pecos , in bunches Oct. 25, 1849

1351. " " in low places, 4-6 ft. tall

1352. " " In thick bunches

1353. " " In thick bunches

1354. Compositae " fl. white or purplish

1355. Cyperaceae " margin of brackish water

1356. Condalis " much branched shrub 2-5ft, fl. yellow, Oct. 28, 1849

1357. Mamillaria hills of the Pecos Oct. 29, 1849

1358. " Valley of the Pecos

1359. cactus hills and valley of the Pecos

1360. Mammillaris " " " " (to the RioGrande & Devils R.)

1361. cactus " " " " Oct. 30, 1849

1362. cactus hills of the Pecos

1363. cactus hills & valley of the Pecos (to the RioGrande & DevilsR.)

1364. Baccharis bottom of the Pecos

1365. Juniper cedar hills of the Pecos Oct. 31, 1849

1366. cactus " " "

1367. cactus " " "

1368. cactus hills of the Pecos & eastwood Nov. 2, 1849

1369. Jungermannia? hills east of the Pecos Crockett Co.

1370. lichen on rocks east of the Pecos dates for this and the following not given

1371. muci on rocks east of the Pecos

1372. Gramineae Setaria magna margin of Live-oak Creek

1373. " Andropogon scop. banks of small creek east of the Pecos

1374. Sagittaria dry bed of small creek east of the Pecos

1375. ----- sides of hills 3 days march from the Pecos Nov. 3, 1849

1376. Loranthaceae R. Bellaan " " " " " perries pellucid reddish-white, on cedar

1377. Lonicera bed of creek east of the Pecos , fruit only

1378. Muci. shade of rocks on hills beyond Devils River Nov. 5, 1849

1383 in herb = Dicranum fl[illegible]

6

[illegible] 7

Devils R[illegible]

8

9

10

11 east of [illegible] crossing Devils R

12 mouth S. Felipe

13 Pinecas R[illegible]

1379. Muci crevices of rocks on hills beyond Devils River Nov. 5, 1849

1380. Ephedra valley of Devils River, much branched and spreading, 3-6ft, fruit & numerous buds Nov. 7, 1849

1381 ---- hills of Devils Riv. a much branched shrub 2-4 ft. tall crevices of rocks, fl. white

1382. Rhus hills of Devils River, branched shrub 2-4 ft. berries scarlet

1383. ---- hillside, Devils River, berries bending to ground and rooting

1384. Rhododendron Viscum Devils River, on mesquite, hackberry etc. Nov. 8, 1849

1385. Muci " on earth

1386. " " dark damp rock-crevices

1387. " " " " "

1388. Helianthus spring 15 mi. east of lower crossing of Devils River

1389. " along creek-bank from Devils R. to the San Felipe Nov. 11, 1849

1390. Aster road-side on Devils River, fl. white

1391 ---- hills of Devils River Nov. 12, 1849

1392. Graminineae Eragrostis priaries near Devils River

1393. Corchorus? along small stream tributary to Devils-

1394. Crassulaceae Sedum Wrightii hills of Devils River, rock-crevices

1395. Cyperaceae spring 15 mi. east of Devils River

1396. Levia (??) nutans hills of Devils River

1397. Leguminosae hills & prairies very abundant 2-6 ft. tall

1398. ---- shrub common on hills much branched, 2-4 ft. tall

1399. Polygala hills of Devils River, fl. greenish yellow

1400. Amaryllidac. agave Devils River, abundant simple or branching from root

1401. Jungermannia? crevices of rock on hills of Devils River

1402. cactus hills of Devils river, single or clustered Nov. 12, 1849

1403. Bidens San Felipe creek in rappid current in water

1404. Euphorbia Nueces bottom and gravelly bed of creek Nov. 13, 1849

Charles Wright's collections of 1851-52
as botanist on the US.-Mex. Boundary Survey

This list of field-numbers is in three parts as follows,-
pt. 1. nos. 1-579, May 9th to June 24th, 1851
plants collected between San Antonio and El Paso, Texas
pt. 2. nos. 1-952, July 4th to Nov. 6th, 1851
plants in so. New Mexico, se. Arizona and no. Sonora
pt. 3. mos. 1-588, Feb-July, 1852.
plants collected in New Mex, no. Chihuahua, ElPaso to S.Antonio.

1. Boraginaceae Castroville to Sabinal, stony prairies, roadside May, 9, 1851
2. Dalea " " " , prairie May, 11, 1851
3. Morus " " " , hills, much branched 4-8 ft.
4. grass " " " , prairie
5. Solanac. Quihi, stream-bank, fl. light purple
6. Manfreda Agave rocky hills on the Hondo (also near the Leona) fl. white with a tinge of yellow
7. Euphorbiac. gravelly banks of the Sabinal May, 12, 1851
8. Vesicaria " " "
9. Ptelea banks of the Sabinal, 2-3 ft, tall
10. Mimosa prairies betw. Hondo and Sabinal, 2 ft. high, forming small thickets
11. Malva margin of thickets, Hondo to Sabinal
12. Leria nutans mesquit-thickets on Comanche Cr.
13. Euphorbiac. gravelly hills, Hondo to Sabinal
14. Dipteracantha prairies, Hondo to Sabinal
15. Composit " "
16. Malva " " , roots tuberous
17. Euphorbia thickets, Hondo to Sabinal
18. Gaillardia hills of the Hondo
19. Euphorbiac. " " "
20. Pentstemon banks of the Hondo
21. Euphorbia prairies, Hondo to Frio May, 13, 1851
22. Oenothera declivities of the Sabinal
23. Malpighia " " "
24. Yucca tortif.? " " "

Wright's collections up thru the 12th are all from Medina County

The collections of the 13th and 14th are from Uvalde Co east of the present city of Uvalde. Wright probably camped on the Rio Leona the night of the 14th near the site of the present city of Uvalde.

He crossed the Rio Nueces (~~west~~ W.NW of present Uvalde) and probably camped there the night of May 15th.

Night of May 13th camp probably on Rio Frio

25. Dasylirion Lindheimer. among rocks, declivities of Sabinal May, 13, 1851

26. Physalis roadside, Hondo to Frio, much branched from root, fl. purple

27. Composit. prairies, Hondo to Frio, fl. light purple

28. Tradescantia occidentalis " " , very smooth & glaucous

29. Asclepias Hondo to Frio, climbing on bushes

30. Yucca filam.? prairies, Hondo to Frio

31. Scutellaria prairies near the Sabinal

32. Euphorbiac. " " "

33. Micromeria Sabinal to the Frio

34. Rutosma stony prairie of the Sabinal, not rare

35. Linum crevices of rocks on the Sabinal

36. (Lucaena retusa
Mimosa pebbly bars of the Frio, 4-6 ft. tall, much branched from root

37. Cucurbit mesquite-thicket, Frio to the Leona, dioecious May, 14, 1851

38. Mimosa prairies, Frio to the Leona, large spreading bush, 4-10 ft. tall

39. Euphorbia prairies, Frio to Leona, many stems from same root

40. Vesicaria mesquite prairies, Frio to Leona

41. grass prairies of the Leona, in large dense bunches

42. Actinella " "

43. Euphorbiac. " "

44. grass Aristida " " , large dense bunches

45. " Leptoloma " " , in small bunches

46. " " " , in small dense bunches

47. " Hilaria " " " " "

48. " Panicum obtusum " " " " "

49. Aristida purpurea " " in large dense bunches

50. Composite " "

51. " sand bars of the Nueces May, 15, 1851

52. Coreopsis prairies betw. the Leona and Nueces

53. Umbellifer " " " "

54. Composite stony prairies, Leona to the Nueces

Having almost certainly camped the night of Myy 15th at the crossing of the Rio Nuecee(slightly NW and about 9 mi. from present Uvalde), the party appears to have camped at Elm Creek the next night(the 16th.). They crossed Turkey Creek ~~(which is~~(near Cline) in extreme western Uvalde County and soon entered eastern Kinney County. Elm Creek (or Chicon Cr.) is about 7 miles due east of Brackettville, Kinney Co.

Probably all the collections made May 16th came from eastern Kinney County.

55. Euphorbia rich prairies between the Leona and Nueces May, 15, 1851
56. Euphorbiac. " " "
57. ------ " " "
58. Aphora " " "
59. Senecio pebbly bars of the Neuces
60. Euphorbia do.
61. Phlox do.
62. Bignoniac. do. ,4-6ft,much branching
63. Salix longipes do. , " "
64. Gnaphalium sandy bars of the Nueces
65. Liliac or Agave? stony hills west of Nueces,2-4 ft. tall
66. Composite stony hills west of Nueces
67. Cordia podocephala Verbeniac. prairies, betw. Turkey and Elm(Chicon) creeks May,16,1851
68. Dipteracanthus ditto.
69. Compositae do.
70. Leguminosae do.
71. Tragia do.
72. grass Hilaria do.
73. Abutilon physocalyx do.
74. Euphorbiac do.
75. Hedyotis limestone prairies on Elm Creek and onward
76. Boerhaavia linearifolia Nyctag. high rocky limestone prairie,Turkey Cr. to Elm Cr.
77. Hoffmannseggia do.
78. Acleisanthes anemophyl. Nyctag, do.
79. Lobelia margin of Elm Creek
80. Asclepias betw. Turkey Cr. & Elm Cr., high rocky limestone prairie
81. Vesicaria do.
82. Compositae do.
83. Polygala edge of thicket, Elm Cr.(and onward) common (San Pedro)
84. Boraginac. rocky prairies of Elm (or Chicon) Creek

All Kinney County

From their camp made the night of May 16th on Elm (or Chicon) Creek, which is about 7 miles due east of present Brackettville, the party next day continued westward through central Kinney County. No. 102 from the head of Las Moras is from the site of present Brackettville.

Piedra Pinta Creek (now called Pinto Creek) is about 7 miles west of Brackettville and appears to have been the site of camp the night of May 17th.

85. Proserpinaca margin of Elm(or Chicon) Creek May 16, 1851

86. Chara do.

87. alga do.

88. --- stony prairies Chicon Cr. to Piedra Pinta Creek May 17, 1851

89. Vesicaria

90. Apocynac.

91. Krameria

92. Euphorbia

93. Aspicarpa

94. Passiflora

95. Aristolochia

96. Malvaceae

97. cactus

98. Compositae alluvial prairie, Chicon Cr. to Piedra Pinta Cr.

99. Abutilon stony prairies Chicon Cr. to Piedra Pinta Cr.

100. Scutellaria do.

101. Micromeria do.

102. Characeae head of Los Moros Cr.

103. Euphorbia stony prairie, Chicon Cr. to Piedra Pinta Cr.

104. Castilleja alluvial soil on Piedra Pinta Cr.

105. Scrophular. do.

106. Malvaceae do.

107. Verbena do.

108. Gilia rigidula Benth do.

109. Abutilon do.

110. Boraginac. do.

111. Astragalus do.

112. Trichocoronis rivularis in Piedra Pinta Cr.

113. Hoffmannseggia Piedra Pinta Cr. to Zoquete Cr., stony prairie May 18, 1851

Sycamore

The night of May 18th the party camped at Zoquete Creek (in his notes for the 1849 expedition Wright called this "Zacate Creek"). It is now called Mud Creek. This creek is about 9 miles west of Piedra Pinta (or Pinto) Creek where the party camped the previous night. It is ~~on extreme western Kinney County less than 2 miles from~~ the Kinney-ValVerde county-line.

The night of May 19th the party reached San Felipe Springs, a mile or so from the present town of Del Rio, Val Verde County. Most of the collections dated May 19th were collected in extreme southeastern ValVerde County ~~west~~ east of Del Rio.

May, 18, 1851

114. Dipteracanthus alluvial prairies betw. Piedra Pinta & Zoquete Cr.

115. (Cercidium texana
Leguminosae stony prairies, PiedraPinta to Zoquete cr.
a much branching & spreading shrub 2-4 ft.tall

116. Compositae stony prairies, on Zoquete Creek. Zoquete Cr.

117. (of Pentacroptilon Wrightii no 1713.)
Boraginaceae stony prairie on Zoquete Creek = Heliotropium angustifolium

118. chara in Zoquete (or Mavericks) Creek

119. Scirpus do

120. " do.

121. " do.

122. fungi stony prairies, Piedra Pinta to Zoquete Cr.

123. Scirpus in Zoquete Creek

124. Talinum auràntiacum alluvial prairies of Zoquete Creek

125. Rivina thickets of Zoquete Creek

126. Mimosa stony prairies, Zoquete Cr. to San Felipe May.19, 1851

127. Gaura " " " "

128. Scrophular. pebbly bed of a creek between Piedra Pinta & San Felipe

129. Salvia do.

130. Euphorbiac. do.

131. Malpighiac. do.

132. Cassia stony prairies, Zoquete Creek to San Felipe

133. grass do.

134. Euphorbia do.

135. Loasaceae stony prairies on San Felipe Creek

136. Mentzelia ? do , much branched from root

137. Compositae do.

138. Chrysopsis do.

139. Hymenatherum do. May, 20, 1851

140. Dalea , much branched, 1-2 ft. tall

141. (Lithospermum matamorense
Boraginac. alluvial bottom on San Felipe Cr.

142. Prunus stony hills of San Felipe Cr.

143. Asclepiad. do.

The party appears to have spent May 20th in camp at San Felipe (i.e. near present Del Rio, Val Verde County)

May 21th the trip north and northwestward (thru Val Verde and Crockett countys) to the Pecos was begun. This route roughly follows the present highway from Del Rio to Comstock and then north thru Juno to several miles within Crockett Co. where the old road went generally northwest to old Ft. Lancaster on the lower Live Oak Creek near the Pecos.

In his first expedition, in 1849, Wright used Devils River for the stream he calls the San Pedro in the present list. In his time the stream was commonly spoken of as the Devils or San Pedro River. It is now known as the Devils River.

May 21 San Felipe to Lower Devils R.
22 (? N. Fork Devils ?
23 ? 2nd Crossing of Devils R
Upper Devils R
27 Lower Devils R.

Big Bend of Devils & S Pedro river
is only a few miles above its mouth
near highway & railroad bridges.

144. Physalis stony hills of San Felipe Creek May, 20, 1851

145. Micromeria do.

146. " do.

147. Plantago do.

148. " do.

149. Compositae do.

150. " do.

151. Perezia do.

152. Sidalcea alluvial prairies of the San Felipe

153. Nyctaginac. stony hills of the San Felipe

154. Dipteracanthus Alluvial prairies & thickets of San Felipe Creek

155. Liliaceae Stony hills of the San Felipe

156. Umbellifer. do.

157. " do.

158. Cuscuta do.

159. Ambrosia alluvial prairies of the San Felipe

160. Linum stony hills of the San Felipe

161. Scrophulariac. do.

162. Psoralea do.

163. Dalea stony hills from San Felipe to San Pedro May, 21, 1851

164. Nyctaginac. do.

165. Euphorbia high cliffs of the San Pedro

166. -----? stony prairies, San Felipe to San Pedro 1-2 ft. tall

167. -----? do.

168. Nyctaginac. stony prairie at camp in big bend of the San Pedro.

169. Pentstemon rocky bluffs, camp at big bend of the San Pedro

170. Euphorbia do.

171. Opuntia do.

172. Erythraea do.

Devils River, Val Verde Co.

173. Yucca hills in the big bend of the San Pedro, 3-4ft. tall May 22, 1851

174. Hymenatherum? do. , 2-3 ft. tall

175. Yucca do. , 3-4 ft. tall

176. Euphorbia prairies in the big bend of the San Pedro

177. Nyctaginac. do.

178. Asclepiad do.

179. Hoffmannseggia stony hills, big bend of San Pedro

180. Compositae do.

181. Eupgorbia do.

182. Apocynac. rocky hills in the big bend of the San Pedro

183. Boraginaceae do.

184. Fouquiera rocky hills of the San Pedro - May, 23, 1851

185. Callirhoe bottom of the San Pedro

186. " do.

187. Cyperus margin of the San Pedro

188. Sida bottom of the San Pedro

189? ------? do.

190. ------? do.

191. Teucrium do.

192. Cucurbit do. , certainly monoecius, Pl. Lindh.#399

193. Opuntia rocky hills of the San Pedro

194. Sida do.

195. ------? do. , fl. white

196. Composite do.

197. Hymenatherum do.

198. Leguminosae do. , Acacia Roemerana?

199. " do. , Mimosa fragrans? May, 24, 1851

200. Paronychia do.

201. fern hills of the San Pedro

202. S
pe

Devils River, Val Verde County

202. Specularia — Hills of the San Pedro — May, 24, 1851

203. grass (Melica nitens) — bottom of the San Pedro — May, 25, 1851

204. " — do.

205. Vitis — pebbly bottom of the San Pedro

206. Rhus — do.

207. Compositae — rock-crevices, hills of the San Pedro

208. (Atriplex canescens) --/--? — bottom of the San Pedro — May, 26, 1851

209. grass — do.

210. Lepachys — do.

211. Clematis — do. — , climbing 6-10 ft.

212. Zygophyll. — do.

213. Riddellia — do.

214, Viola — shady bottom of the San Pedro

215. Psoralea — rocky hills of the San Pedro

216. Coreopsis (Thelesperma) — do.

217. " — do.

218. Verbena — do.

219. Umbelliferae — do.

220. Compositae — do.

221. Cassia pumila — bottom of the San Pedro — May, 27, 1851

222. Crysimum — pebbly bars of the San Pedro

223. grass — alluvial bottom of the San Pedro

223. " — do.

224. "(Salvia) — do.

225. " — do.

226. " — do.

227. " — do.

228. Monarda — hills beyond the San Felipe? (San Pedro?)

229. grass — do.

230. Euphorbia — do.

All Crockett County

The road left the San Pedro (i.e. Devils River) about a mile below the present town of Juno and following the fork of Devils River known as Johnson Creek to 5-10 miles north of the Val Verde-Crockett county-line. It then went into the valley of the next paralleling stream to the west (i.e. Howards Creek) to Howards Springs. From here, continuing generally NW. in Crockett Co., the road led into Live Oak Creek down which the road led to the Pecos. Near the mouth of Live Oak Creek was located old Ft. Lancaster.

231. Echinocereus rocky hills beyond the San Pedro May, 27, 1851

232. Verbena do. May, 28, 1851

233. " do.

234. Convolvulus do.

235. Cooperia pedunculata do.

236. Potomogeton pectinatus Howard Creek

237. " foliosus. do.

238. Compositae pebbly bed of Howard Creek

239. Juncus margin of Howard Creek

240. Eriogonum pebbly bed of Howard Creek May, 29, 1851

241. Rhamnaceae? prairies, Howard Cr. to Live Oak Cr., 1-2 ft. tall

242. Compositae do.

243. Cuscuta do.

244. Compositae do.

245. " do.

246. Cirsium do.

247. Cucurbitaceae Rocky banks of Howards Creek

248. Bolivaria pebbly bed of Howard Creek

249. Tradescantia occidentalis valley of Howard Creek

250. Cooperia valley of Live Oak Creek

251. Polygala valley of Live Oak Creek May, 30, 1851

252. Cyperac. margin of Live Oak Creek

253. Lepidium valley of Live Oak Cr.

254. Castilleja do.

255. Talinum do. , near T. aurantiacum with light yellow fl. & narrower leaves, yellow var. alone seen

256. Scirpus margin of Live Oak Cr.

257. Engelmannia valley of Live Oak Cr.

258. Polygala hills of Live Oak Creek May, 31, 1851

near the Ferry across
probably all from ~~the east bank of~~ the Pecos
~~and so from Crockett County~~
a few miles (7mi) above Ft. Lancaster
in adjoining Crockett & Pecos counties
in the vecenity of present-day Sheffield

259. Krameria hills of Live Oak Creek May, 31, 1851

260. Leguminosae do.

261. Gnaphalium Valley of the Pecos

262. Compositae do.

263. Asclepias do.

264. Dichondra do. ,in live-oak groves

265. Scirpus margin of the Pecos

266. Oenothera stony hills of the Pecos, near O. serrulata (Sabinal-Pecos)

267. Pentstemon do. , fl. blue-purple

268. Astragalus do. ,fl. yellow

269. Gaillardia do.

270. Asclepias do.

271. Sida do.

272. Filago? do.

273. Talinum aurantiacum alluvial soil, valley of the Pecos

274. Asclepias do.

275. Gaura stony hills of the Pecos June 1, 1851

276. Nyctaginac. do. ,fl. white

277. Parietaria high rocky hills of the Pecos

278. Euphorbia high stony hills of the Pecos

279. Asclepias do.

280. Vesicaria do.

281. Galium high rocky hills of the Pecos

282. Nyctaginac. do.

283. Compositae do.

284. fern do.

285. Lygodesmia high stony hills of the Pecos

286. Plantago do.

287. fern do.

288. "Pellaea microphylla do.

probably all from ~~east~~ west side of the Pecos
and so from ~~Crockett Co.~~ Pecos County

along road between Sheffield & Iraan

289. grass Distichlis ♀ Banks of the Pecos June, 2, 1851

290. " Distichlis ♂ do.

291. Indigofera pebbly bed of a small tributary of the Pecos

292. Compositae Valley of the Pecos, alluvial soil

293. Boutileia? [spelling?] valley of the Pecos, stony prairie

294. Hoffmannseggia Valley of Pecos, stony prairie, root a woody tuber

295. " Valley of Pecos, alluvial soil near river

296. Heliotropium Greggii Valley of Pecos, stony hills

297. Hymenopappus do.

298. Mammillaria radiosa Valley of Pecos, alluvial soil

299. Compositae Valley of Pecos, stony hills, 2-4 ft. high, branched

300. Dalea Valley of the Pecos, stony hills

301. Oenothera Valley of Pecos, stony prairies

302. Compositae do. , dense patches, river-margin

303. grass Muhlenbergia arenacea do. , alluvial soil

304. Euphorbia do. , do.

305. Eriogonum do. , on stony hills

306. Physalis do. , sides of rocky hills

307. Hymenatherum do. , sides & summits of rocky hills

308. Abutilon do. do.

309. Scrophulariac. do. , sides of rocky hills

310. Bolivaria do. do.

311. Desmanthus do. do.

312. Scutellaria do. do.

313. Micromeria do. do.

314. grass Sabana (no 2094) do. do.

315. Dalea frutescens do. do.

316, Eutoca do. , sides & summit of rocky hills

317. Mimosa do. , sides of rocky hills

probably all from the ~~east~~ west side of the Pecos
and so from ~~Crockett Co.~~ Pecos County

along road between Sheffield & Iraan.

318. Sphaeralcea — Valley of the Pecos, alluvial soil, June 2, 1851

319. Abutilon — do. — do.

320. Gaura — Valley of the Pecos, alluvial soil — June 3, 1851

321. Oenothera — do. — do.

322. Hoffmannseggia — do. — stony prairies, fl. very sweet scented

323. Nyctaginac. — do. — stony prairies

324. Solanum — do. — alluvial soil, abundant

325. Scrophulariac. — do. — alluvial soil

326. Actinella — do. — stony prairies

327. Oenothera — do. — alluvial prairies

328. Scrophulariac — do. — do.

329. Echinocactus — do. — stony hills

330. Vesicaria — do. — stony hills & alluvial prairies

331. Euphorbia — do. — sides of rocky ridges

332. Palafoxia — do. — sid s of rocky ridges & in ravines

333. (Stenandrium barbatumnsp) Scrophulariac. — do. — sides of stony ridges

334. Polygala — do. — sides of stony ridges & in alluvial at base

335. Streptanthus — do. — near summit of stony ridges

336. Heliotropium — do. — in alluvial soil, June 4, 1851

337. Aphora — do. — do.

338. Lygodesmia — do. — do.

339. Cucurbit — do. — do. , climbing bushes

340. Physalis — do. — do.

341. Lepidium — do. — do.

342. Oenothera — do. — do.

343. (Atriplex canescens) Chenopod. — do. — in sandy soil near Pecos

344. Loranthac. — low rocky hills on cedars

345. Leucophyllum minus — Rocky hills of the Pecos

346. Scrophulariac. — Rocky hills of the Pecos, fl. light purple

347. Cereus Greggii — in loose sandy soil near margin of the Pecos

All Pecos County

The party left the Pecos River apparently on June 5th, probably near the present town of Iraan and travelled west to Escondido Creek (now know as ~~Mule Cr.~~)

The 6th. the party continued along Escondido Creek (8 miles) to Escondido Springs.

Comanche Springs (the present Stockton) lies 20 miles west of Escondido Springs

June 5, 1851

348. Compositae valleys from the Pecos to Escondido Creek, alluvial soils

349. Statice near Escondido Creek, soil impregnated with salt

350. Fallugia betw. Pecos & Escondido Cr., alluvial soil

351. Compositae do.

do.

352. " do.

353. Scrophulariac. do.

354. Opuntia arb. do. ,3-6 ft. tall

355. Boraginac. Pecos to Escondido Creek, stony prairie

356. Eutoca Phacelia Popei do. do.

357. Nyctaginac. Selinocarpus diffusus Valley of the Pecos near the hills

358. Chara in Escondido Creek June 6, 1851

359. " do.

360. Cereus hills of Escondido Creek, stems very numerous

361. Umbelliferae hills of Escondido Creek

362. Scirpus margin of Escondido Creek

363. Cirsium grassy flats near Escondido Creek

364. Juncus do.

365. Nyctaginac. do. , in small mesquite-thickets

366. Cereus prairies in valley of Escondido Cr., stems few or single

367. Astragalus prairies at Escondido Springs

368. Cereus stony prairies along Escondido Creek, stems few or single

369. Gnaphalium among rocks, dry bed of Escondido Creek

370. Opuntia Escondido Springs

371. Sphaeralcea Escondido Springs to Comanche Spr., stony hills, June 7, 1851

372. Leguminosae do. "

373. Dipteracanthus do. "

374. Opuntia do. ,rocky hills

375. Cryptantha mexicana do. ,stony hills

376. Nicotiana Escondido Springs , rock-crevices

377. Cirsium grassy flats, Escondido Spr.

Comanche Springs is the present town of Stockton Spr.
about 10 miles west of Comanche lies Leon Springs where the party appears to have camped the night of June 8th.

The next sure wateringplace on the road is in the lower reaches of the Limpia at about the Pecos-Jeff Davis county-line., and about 35 miles west and somewhat south of Leon Springs. Here the party probably camped the night of June 9th.

The collections of June 11th are probably from within Jeff Davis County, those of previous date are from Pecos County

378. Actinella rocky hills above Escondido Springs June, 7, 1851

379. (Pentacroplys Wrightii Nyctaginac. stony hills at Comanche Springs

380. (Silinocarpus diffusus " do. the two growing together

381. Actinella do.

382. -----? "Eryngium Aberianum"? do. June 8, 1851

383. Croton do.

384. Mamillaria macromeris Comanche Spr. to Leon Sprs. prairies

385. -----? low saline flats near Leon Sprs., fl light purple

386. chara in Leon Springs

387. Cooperia on stony hills near Leon Springs, fl yellow

388. Distichlis grass margin of Leon Sprs. in dense patches June 9, 1851

389. Asclepias Leon Sprs. to the Limpio, prairie-dog towns

390. Opuntia stony hills of the Limpio

391. Phaseolus Valley of the Limpio, alluvial soil

392. Compositae do. do.

393. Carex Panicum obtusum mountain springs flowing towards the Limpio

394. Vernonia mountain valley of the Limpio

395. Habenaria mountain springs flowing towards the Limpio

396. Cirsium mountain valleys descending to the Limpio

397. (Boraginaceae Oreocarya Jamesii pebbly bed of the Limpio

398. Crucifer do.

399. Eryngium do.

400. crucifer valley of the Limpio, alluvial soil

401. Opuntia bed of Limpio, light alluvial soil June 11, 1851

402. Senecio do , among pebbles

403. Asclepiad. valley of the Limpio, climbing low bushes

404. Gaura do. , alluvial soil

405. Potomogeton in the Limpio

406. Ranunculus margin of Limpio

407. Monarda valley of the Limpio, alluvial soil

Along Limpia Creek in the Davis Mts.
Jeff Davis County

During his trip of 1849 Wright called the creek Limpia but adopted the masculine ending, Limpio, on his expedition of 1851-52. Present usage sanctions, Limpia

Wright in letter to Gray dated July 9, 1851 states,-
"...but when we reached the Limpio which before furnished me with so great a variety of plants we found it perfectly dry, a recent fire had swept over the whole country to the very summit of the mountains and I found only occasionally a plant worthy of notice. The same parching drought had extended to this place (Frontera near ElPaso) and How much beyond I do not know. In the valley of the Rio Grande I found a very scant vegetation"

In Emory's Rep. Mex. Bound. Survey 1: (1857) there are illustrations of,-
"Limpia - Wild Rose Pass" opposite pg 84
"Site of Fort Davis, Limpia Mountains" pg 88

Re Wild Rose Pass see McVaugh, Wrightia 1: 207-213 (1948)

408. Nyctaginac. Mirabilis Wrightii Valley of the Limpio, thickets , June 11, 1851

409. Cucurbit. do. ,alluvial soil

410. Juncus margin of the Limpio

411. " do.

412. " do.

413. Carex do.

414. Asclepias pebbly bed of the Limpio

415. Erigeron valley of the Limpio, rocky hills

416. Phaseolus do. do.

417. Castilleja do. do.

418. Cereus. Valley of the Limpio , section with fruit

419. Equisetum margin of the Limpio

420. Galium bed of the Limpio

421. " do.

422. Opuntia valley of the Limpio, alluvial soil

423. ----? summit of mountain, WildRose Pass, 2-5ft.tall, June12, 1851

424. ----? do. do. ,4~~0~~10 ft. tall

425. grass Wild Rose Pass, sides of mountains

426. Agave WildRose Pass, common on mountain side, flowers only

427. Gaura Wild Rose Pass, valley f the Limpio

428, Compositae sides of hills, valley of Limpio

429. Malpighiac. valley of Limpio, rock-crevices on hillsides

430. -----? do. ,up hillsides to summits

431. Rosa valley of Limpio, forming large thickets near creek, 2-3 ft. tall

432. Quercus valley of Limpio, mountain-sides, spreading, 10-20 ft. tall.

433. Pentstemon valley of the Limpio, alluvial soil

434. Vitis valley of the Limpio, mountain-sides, climbing 8-10 ft.

435. Quercus valley of the Limpio, mountain-sides, spreading, 10-15 ft.

436. Asclepias head of Limpio, prairie-dog towns, 1-2 ft. tall

437. Dalea do.

Jeff Davis County, along the Limpia in Davis Mts.

438. Galium bed of the Limpio June 12, 1851

439. Ranunculus do.

440. Compositae margin of the Limpio, sandy soil

441. Salix bed of the Limpio

442. Urtica margin of the Limpio, much branched from root.

443. Compositae Head of Limpio, prairie-dog towns

444. Hoffmannseggia do. do.

445. Vesicaria do. do.

446. Phlox Nuttallii valley of the Limpio, alluvial soil

447. Oenothera hillsides of the Limpio , fl. expand about sunset

448. Leguminosae do.

449. Desmanthus do.

450. Polygala do.

451. Oxybaphus Nyctaginac. do.

452. Boraginaceae Valley of the Limpio at upper camp

453. Actinella do.

454. Clematis do.

455. Carex do.

456. Micromeria head of Limpio, hillsides

457. Delphinium valley of Limpio at upper camp. June 13, 1851

458. Linum do.

459. grass do. , in small tufts

460. " do. do.

461. Stipa tenuissima do. , large dense tufts

462. " do. , small tufts

463. Oxybaphus Nyctaginac. do.

464. Ionidium do.

465. Scroph. or Bignon. mountain-side, head of Limpio, 2-3 ft. tall

466. grass do.

467. Leguminosae do.

Jeff Davis County

See notes for August 1849

Wright appears to have reached the head of the Limpia (Painted Camp) and camped there the night of June 12th. and remained there the 13th.

June 14 he went from Painted Camp to to Smiths Run

June 15 from Smiths Run to Rain Water Creek

June 16th from Rain Water Creek to Van Horne Wells

June 17th from Van Horne Wells to Eagle Springs.

June 18th or 19th he reached the Rio Grande.

468. grass bottom of Limpio at its head June 13, 1851

469. " do.

470. " do.

471. Asclepias summit of mountains at the head of the Limpio

472. grass bottom of the Limpio

473. " do.

474. Cerastium do.

475. Compositae crevices of basaltic rocks, mountains of the Limpio

476. Labiate do. do.

477. Eriogonum summit of mountains, head of the Limpio

478. Croton do.

479. Epilobium margin of Limpio at its head

480. Scirpus do.

481. Oxalis valley of the Limpio at its head, stony soil

482. Gaura Valley of the Limpio at its head

483. Galactia rocky mountain-side at head of Limpio

484. grass Elionurus do.

485. Pentstemon do.

486. Compositae prairie-dog towns in valleys betw. Painted June 14, 1851 Camp & Smiths Run

487. Calliandra do.

488. Malvaceae do.

489. Chrysopsis valleys between Painted Camp and Smiths Run

490. Desmanthus mountain valleys Painted Camp to Smiths Run

491. Pentstemon do.

492. Portulaca do.

493. Gutierrezia do.

494. Physalis do.

495. Liliaceae Anthericum margin of dry mountain ravines

496. Munora (spelling?) mountain valleys and sides

497. Rhamnaceae mountain valleys and sides

Th

During June 16th Wright ~~probably~~ crossed the Jeff Davis-Culberson county-line and camped that night at Van Horn Wells in Culberson Co., $9\frac{1}{2}$ miles due south of present Van Horn

The night of June 17th he was at Eagle Springs, in Hudspeth County, (about 8 miles from Van Horn Wells)

The party appears to have made the 30 odd miles from Eagle Springs to the Rio Grande on June 18th.

The party struck the Rio Grande ~~near~~ 4 mi below the site of old Ft. Quitman which was opposite the present town of La Banderas in Mexico. This is about 80 miles down the Rio Grande from El Paso and is in Hudspeth County.

The collections of June 20th and following are almost certainly from present El Paso Co.

498. Galactia mountain-sides Smiths Run to Providence Cr. June 15, 1851

499. Abutilon do.

500. Allionia ciliata Nyctaginac. near Smiths Run in sandy alluvial soil

501. Compositae stony hills near Smiths Run

502. Sophora do.

503. Bolivaria do.

504. Phacelia congesta Eutoca among rocks, banks of Providence Cr.

505. Talinum paniculatum do. , near T. sarmentosa, fl. yellow

506. Dichondra do.

507. Solidago summit of hills at RainWater Camp

508. Cassia valleys from RainWater Camp to Eagle Sprs. June 16, 1851

509. Allionia incarnata, Boerhaavia erecta Nyctaginac. do. , around prair.-dog holes

510 " do. do.

511. Compositae do. do.

512. Eriogonum abertianum do. do.

513. Asclepias do do.

514. Sphaeralcea Sida lepidota type distr. no. 884 do. do. fl. light yellow

515. Chrysopsia valleys fron Deadman's Pass to the Wells.

516. Zygophyllac. do.

517. Verbena do.

518. Malvaceae do. , in prair.-dog towns

519. Cereus do.

520. Krameria do. , stony soils

521. Baileya do. , do.

522. Leguminosae do. , 4-8 ft. tall

523. Opuntia do.

524. Koeberlinia do. , 2-4 ft. tall, June 17, 1851

525. Nyctaginac. Selinocarpus chen. do. , alluvial soil

526. Ageratum at the Wells in alluvial soil

~~527. margin of the Wells~~

see preceding page

527. Scirpus margin of the Wells June 17, 1851

528. -----? at the Wells in rock-crevices

529. Malvaceae do.

530. Physalis at the Wells near the branch

531. Mammillaria at the Wells in alluvial soil

532. Dasylirion at the Wells on stony hills

533. Mentzelia valleys near Eagle Springs

534. Compositae do.

535. Mamillaria at the Wells in rock crevices

536. Euphorbia stony hills at Eagle Spring June 18, 1851

537. Greggia valley of the Rio Grande 80 miles below ElPaso, June, 19, 1851

538. Micromeria canyon leading to the Rio Grande

539. Opuntia sandy ridges in Rio Grande Valley 80 mi. below El Paso

540. Potentilla old bed of the Rio Grande 50 mi. below El Paso June20, 1851

541 Nasturtium do.

542. Aster do.

543. Scirpus do.

544. Panicum Echinochloa crusg. do.

545. Coreopsis do.

546. Malvaceae low bottoms of Rio Grande 50 mi. below El Paso

547. Physalis do.

548. Veronica do.

549. Poa Eragrostis pectinacea do.

550. Cyperus do.

551. Eleocharis do.

552. Portulaca do.

553. Solanum do.

554. grass Panicum [illegible] do.

555. Leguminosae do.

556. Equisetum low bottom of the Rio Grande 60-80 mi. below El Paso

557. Scirpus low bottom of the Rio Grande 60-80 mi. below ElPaso June 20, 1851

558. Rumex violescens. do.

559. Salix nigra do.

560. grass Imperata Hookeri high bottom, 60-80 mi. below El Paso

561. " low bottom 60-80 mi. below El Paso June 21, 1851

562. Strombocarpus valley of the Rio Grande

563. Helianthus sandy ridges, R.G. Valley 40-50 mi. below ElPaso

564. Hymenolobus do.

565. Nyctaginac. Abronia cyclophera do. , much branched from base and spreading.

566. Euphorbiaceae sandy ridges, R.G. Valley 40-50 mi. below El Paso

567. Verbena do. , prostrate, much branched from the ground

568. Baccharis margin of the Rio Grande below El Paso, 2-4 ft.

569. Chara in a subsaline & mineral pond pond below San Elisario June 23, 1851

570. Potomogeton pectinatus do.

571. ----- margin of a subsaline & mineral pond below S. Eilzario

572. Baccharis Rio Grande bottom below El Paso, 2-4ft. June 24, 1851

573. Wislizenia do. , sandy soil, 1-2 ft. tall, much branched.

574. Compositae do.

575. Leguminosae do.

576. Malvaceae do.

577. Phorodendron do.

578. Populus Rio Grende bottom, almost the only timber, 20-30 ft. tall

579. Salix do , 4-8 ft. tall.

end of pt. 1 of 1851-52 lists.

EL PASO, TEXAS
CIUDAD JUAREZ, MEXICO
AND VICINITY
SCALE OF MILES
0 1/4 1/2 1
COPYRIGHT BY
The H. M. Goushá Company
CHICAGO, ILL. LITHOGRAPHED IN U. S. A.
CONOCO
N
Frontera lat. 31°48'
approximate location
Lat. 31°47'
1 in = 1 mi
Hart's Mill
"Coons" = Franklin
MESA ROAD
Drain Canal
TEXAS
NEW MEXICO
Rio Grande
Cement Plant Reservoir
UNITED STATES
MEXICO
NEW MEXICO
CHIHUAHUA
Courchesne
Smelter
Charles Davis Park
Texas College of Mines
Museum
Diversion Dam
McKelligon Canyon
MOUNT FRANKLIN
Canyon Park
Baptist Sanitarium
Madeline Park
Arroyo Park (Undeveloped)
Scenic Park
Houston Square
San Jacinto Plaza
Cleveland Square
Public Library
TEXAS ST.
MESA AVE.
INTERNATIONAL
MEXICO
Canal
U.S. Customs and Immigration
Immigration Office
Mission Nuestra Señora de Guadalupe
City Government Offices
City Market
Mexican Government Customs House
Mex. National R.R. Sta.
Juarez Mon.
16 DE SEPTIEMBRE AVE.
VICENTE GUERRERO AVE.
JUAREZ AVE.
Acequia del Pueblo
Municipal Cemetery
CITY LIMITS OF CIUDAD JUAREZ
Memorial Park
Newman Park
Grandview Park (Undeveloped)
La Pl

List for 1851-52 - second part

1. Cyclolama atriplicifolia
Amaranthaceae sandy bottom of Rio Grande at Frontera July, 4, 1851
2. Leguminosae margin of acequias at El Paso, introduced? July 5, 1851
3. Trianthema
Portulaceae field at El Paso
4. grass do.
5. Malvaceae do.
6. Cuscuta do.
7. Leguminosae do. , introduced?
8. Ranunculus sandy bottoms of Rio Grande, stoloniferous
9. Heliotropium Curassavicum do.
10. Leguminosae bottoms of Rio Grande, much branched & spreading, 6-10 ft.
11. Salix Lasiolepis margin of Rio Grande , 4-8 ft. high
12. Potamogeton Rupprechtia stagnant subsaline lake in RioGrande bed at Frontera July, 9, 1851
13. Krameria Rio Grande valley at Frontera, sandhills, 2-3 ft. tall, much branched & spreading, forming thick bunches 2-3ft. broad
14. Juncus Rio Grande bottom at Frontera July 18, 1851
15. Actinella do. , much branched from root
16. Juncus do.
17. Potentilla do. , on sand-bars
18. Aster! do. do.
19. Gnaphalium do. do.
20. Scirpus do.
21. Tidestromia ---? sides of mountain at Frontera July 19, 1851
22. Asclepias do.
23. -----? do. , 2-4 ft. tall with short stout divaricate branches
24. Chenopod. Atriplex canescens hills near Frontera, 3-4 ft. high, branching widely
25. fern rock-crevices, mountain near Frontera
26. Rosaceae mountain-side near Frontera, 2-4 ft. much branching
27. Phorodendron do , on small scrubby oaks.

Frontera (or Whites Ranch) is on the Texas side of the Rio Grande, between El Paso and Canutillo, and probably at the bend in the Rio Grande where that river turns SE. towards El Paso after having flown generally due south for most of the distance in which it is the boundary between Texas and New Mexico. Bartlett 1:194, states that it was used as an astronomical observatory by the Boundary Commission. "Soon after we gave it up it was destroyed by the Apaches" The town or settlement no longer exists. It was obviously near the north end of the narrows of the Rio Grande in which the river cuts thru the hills northwest of El Paso For Bartlett, 1:198-9, states thet,-"The bottom land does not appear for some distance beyond the observatory, or White's Ranch" Bartlett says, l.c.194, says that Frontera 8 miles above Hart's mill (at the falls of the Rio Grande) just north of the American settlement at El Paso. It is in El Paso County, Texas

dartful / really just 4-5 mi?

"the Cottonwoods" mentioned by Wright July 26th. seems to refer to no town. It was probably given in reference to their campamong the cottonwoods, on the Rio Grande bottoms, It is probably about half way between El Paso and Las Cruces, in Dona Ana County, N.M.
= 13 3/4 mi S of Ft. Fillmore & 10 1/4 mi north of Canutillo is near Berino N.M.

Dona Ana was an old Mexican town, because of border incidents it was becoming depopulated in Wright's time, and now is of very minor importance. Bartlett, 1: 200, says it is 8 miles (north) from Las Cruces. Standley, C.U.S. Nat. Herb. 13:155, says it is 1-2 miles east of the Rio Grande in Dona Ana County, New Mexico.

Frontera lat 31° 48' 45" fide Emory Rep. Mex Bound. 1:193 (1857

This is 1.75' north of 31°47', the lat. of Mex boundary west of Rio Grande or almost about 2 miles north of boundary line!

It was probably located near the Santa Fe tracks (& Highway Alt. 30), ca 5 miles NW, as crow flys, from the down-town plaza in El Paso & a mile and a half NW of the Cement Plant Reservoir, probably near the Bench Mark is located on the "Canutillo" sheet of the US Topographic Maps.

see map facing previous page

There is an engraving of "The Rio Grande near Frontera" in Emory's Rep. Mex. Bound. Survey 1: facing pg. 46 (1857)

For map of El Paso area in 1878 see Annual Report of Wheeler Surveys 1879, opposite pg. 81
also text 47-48

28. ----? bottom of RioGrande above Frontera, subsaline soil, July 26, 1851

29. Compositae do. do. , many annual stems from the perennial root.

30. Wislizenia Rio Grande valley above Frontera, sandy soil, much branching divaricately from ground 2-3 ft. tall

31. Euphorbias Rio Grande valley above Frontera, sandy soil

32. Helianthus do. do. , 2-3 ft. tall

33. Cyperus sandy banks of the RioGrande at the Cottonwoods

34. Gnaphalium do.

35. Palafoxia do.

36. Boraginaceae do.

37. Scrophulariac. do.

38. Cnicus valley of the Rio Grande below Dona Ana, sandy soil, July 28, 1851

39. Chenopod. atriplex expansa Wats sand bars in Rio Grande below Dona Ana

40. Compositae do.

41. ----? do. , 1 ft. tall, divaricately much branching

42. Scirpus margin of RioGrande below Dona Ana

43. Eleocharis banks of RioGrande below Dona Ana

44. Hymenolobus valley of RioGrande below Dona Ana, sandy soil

45. Salicornia allenrolfea do. , 3-6ft. tall, much branching

46. fungus Rio Grande valley below Dona Ana, sandy soil

47. Hoffmannseggia do. , stiff black soil

48. ---- Rio Grande valley at Dona Ana, sandy banks of acequias

49. Nyctaginac. Cyclolama atriplicifolia Abronia cycloptera do. , sandy soil

50. Oenothera at Dona Ana, sandy soil, procumbent, divaricately much branched from root

51. Asclepias at Dona Ana, climbing 2-4 ft. on shrubs

52. Hymenatherum do. , in sandy soil and in fields

53. Portulaca retusa do. do. ; fl. small yellow, petals slightly emarginate

54. Datura do. do. , fl pale purple, nocturnal or matutine

55. Baileya do. do. , much branched from near root

56. do. do. , climbing over bushes 2-3ft.

Frontera (C. Wright in letter to Torrey, June 28, 1851)

"Frontera is a single adobe house some 200 ft. by 100 ft. in dimensions, including the court or open enclosure, so common, I may say universal in oriental architecture. It is situated about 8 miles above El Paso, belongs to a Mr. White, and is rented by the Boundary Commission as a kind of camp, storehouse, observatory, etc."

July 28, 1851

57. Galardia at Dona Ana in fields

58. Portulaca do. , sandy soil

59. Euphorbia do.

60. Alternanthera (Tidestromia) do.

61. Euphorbia do.

62. Eutoca (Phacelia) at Dona Ana on sandhills in Rio Grande bottom

63. Chrysopsis do.

64. Marshallia do.

65. Portulaca fields at Dona Ana

66. Euphorbia do.

July 28, 1851

67. Martynia sandy soil at Dona Ana, branching near ground & spreading 1-2 ft. wide & 6-15 in. high, fl. white with light red border

69. Anemopsis Rio Grande bottom above Dona Ana, large patches on subsaline soil,

July 29, 1851

68. Galactia San Diego at crossing of river above Dona Ana, stony hillsides,

July 29, 185,

70. Petalostemon Rio Grande bottom above Dona Ana, sandy soil

71. grass do. , subsaline soil

72. Scrophulariac. sand-hills of Rio Grande above Dona Ana, much branching

73. Hymenolobus do.

74. ----- do. do.

75. Eriogonum annuum. sandy ridges of RioGrande bottom above DonaAna

76. Compositae do.

79. Glycirrhiza low bottoms of Rio Grande above Dona Ana, abundant

80. Compositae do.

81. Labiate do.

77. Eriogonum rotundifolia valley of Rio Grande on stony ridges

78. Compositae do.

July 30, 1851.

82. Martynia near Santa Barbara, loose sandy soil, fl. large yellow

83. Nyctaginac. do. do. , much branched from root

84. Scutellaria stony hills, Santa Barbara to Coppermines, branching from root

85. Sida do. do.

86. Sidalcea do. do.

almost certainly near present town of Hatch!
San Diego crossing probably near old Ft. Selden!

Santa Barbara — Standley, C.U.S.Nat.Herb.13:167, says "A Mexican settlement on the Rio Grande about 25 miles north of Las Cruces, visited by Wright" and on his map shows it about 6 mi. NW of Fl. Selden (Radium Springs). Dona Ana County, New Mexico. incorrect ??

see foot of page

Bartlett, who travelled the route which Wright later took from El Paso to the Coppermines, gives the following regarding Santa Barbara. He left Dona Ana the AM of Apr. 27th "We continued ~~continued~~ on our course towards the north, and soon struck the great Jornada del Muerto, on the Santa Fe road, which we followed for 9 miles, when we turned off to San Diego, the old fording place" They crossed the Rio Grande and camped 8 miles up on the west side, having made a total of 26 miles during the day. Starting early the next day they continued northward along the river bottom 14 miles to a "new settlement on the river's bank, called Santa Barbara". The next watering place being 20 miles distant, at Mule Sprs., they camped.

Judging from Wright's list, his party probably travelled from Doña Ana to San Diego crossing of the Rio Grande on the 28th and arrived at Santa Barbara on the 29th.

Bartlett, reached Mule Springs on the afternoon of Apr.29th., having followed a course, south of west, first a couple of miles up river then over and thru a range of hills to Mule Springs at their western base, a total distance of about 23 miles. On the 30th Bartlett going south reached Cooke' Springs 12 miles from Mule Spr. at midday and then swung NW to the bed of the Mimbres about 20 miles beyond.

Wright appears to have camped at Cooke's Spring the night of July 31st. This locality, near old Ft. Cummings, is 15 miles north and a bit east of Deming, and is in northern Luna County, New Mexico

~~Mule Springs must~~ be east of Cooke Spring and near the ~~Luna-Dona Ana~~ county-line, but probably within Luna Co.

The route travelled by Wright went NW from Cooke Springs and hit the Mimbres River near the present Luna-Grant county-line. Wright's collections of August 1st are probably all from Grant County

Note Bartlett's itiniary and map show Santa Barbara to be much further north than is given by Standley, in fact in extreme NW corner of Dona Ana County above Hatch (ca. 30 mi. NW. of Ft. Selden). This would place Mule Springs about the SW corner of Sierra County.

Dona Ana Co N.M.

Santa Barbara = Old Fort Thorn about 5 miles up river from Hatch

San Diego is about 10 miles up river from Fort Selden

July 30, 1851

87. Polygala stony hills between Santa Barbara and the Coppermines

88. Hedyotis do. ,H.humifusa,densely matted

89. Nyctaginac. Selinocarpus chen. do.

90. grass Aristida do. , dense bunches

91. Eriogonum Abertianum do.

92. Gaura prairies from Santa Barbara to Coppermines July 31, 1851

93. Malvaceae do.

94. Sophora valley at Mule Creek

95. Oenothera do. ,margin of dry creek bed

96. Engelmannia do.

97. Geranium do.

98. Bolivaria do.

99. Eriogonum valley near Cook's Spring

100. Cucurbit. on rocky ridges at Cook's Spring

101. Compositae prairies at Cook's Spring

102. grass margin of water at Cook's Spring

August 1, 1851

103. Quercus hillsides near Cook's Springs,4-10 ft.tall,much branched

104. Pentstemon do.

105. Baileya sandy valleys of Mimbres Mts.

106. Compositae

107. Malvaceae } 1 of these is cotype with 514 [1851] of S. lepidota although Gray gives July

108. " }

109. " bottom of the Mimbres ,in low ground

110. " do.

111. Labiate do.

112. Glycirrhiza do. , abundant

113. Verónica growing in water of the Mimbres

114. Ranunculus do.

115. Potomogeton do.

116. " do.

Grant County, New Mexico

The Coppermines are in Grant County, N.M. and are about 13 miles east of Silver City. They are near the present town of Santa Rita. The full name of the mining district is Santa Rita del Cobre. In some of his later collections Wright refers to the locality as ,-Cobre

Bartlett, 2:568, says " Fort Webster was established at the Copper Mines, or Santa Rita del Cobre, after they were abandoned by the Boundary Commission in October, 1851"

117. ------- growing in water in Mimbres August 1, 1851

118. chara do.

119. Mimulus margin of the Mimbres

120. Umbelliferae do.

121. Ranunculus do.

122. Verbena in low valley of the Mimbres

123. Humulus low bottom of the Mimbres, climbing over bushes

124. Cuscuta do. , on weeds and willows

125. grass margin of the Mimbres

126. Desmanthus prairies from the Mimbres to the Coppermines, Aug. 2, 1851

127. Gaillardia do.

128. " do.

129. Physalis do.

130. Galactia? or Phaseolus? sandy stream-sides, Mimbres to Coppermines, root tuberous or fusiform, very large & penetrating deeply

131. Hoffmannseggia prairies from Mimbres to Coppermines

132. Pentstemon pebbly creek-beds, Mimbres to the Coppermines

133. Streptanthus do. do.

134. Erysimum do. do.

135. Fraxinus do. do. , 10-20 ft. high

136. Juniperus hillsides , do. , do.

137. Quercus along streams & hillsides, do., , 10-15 ft. high

138. ------ low ground along streams, do.

139. Lepidium valley of Coppermine Creek, sandy soil

140. Loranthaceae hills of Coppermine Cr. , on cedar

141. Eriogonum valley of Coppermine Creek

142. Compositae do.

143. Pentstemon do.

144. Gaillardia do. , sandy soil

145. Gaura do.

Grant County, New Mexico

In his letter to Gray dated, Nov. 30, 1851, Wright states, - "In July I went to the Coppermines and besides collecting on the way, secured every thing about the mines within a a moderate distance (for it was dangerous to venture far on account of the Indians) among which you will find I hope some new and interesting things"

146. Galactia valley of Coppermine Creek, climbing low bushes, August 2, 1851
root penetrating very deeply, enlarged or tuberous

147. Cooperia valley of Coppermine Cr., sandy soil, fl. yellow

148. cruciferae do. ,

149. Ranunculus hillsides of Coppermine Creek.

150. Mirabilis Wrightiana Nyctaginac. valley of Coppermine Cr., muchibranched from root, 2ft. tall Aug. 4, 1851

151. Thalictrum hillsides of Coppermine Creek, 2-4 ft. tall

152. Cercocarpus do. , 6-8 ft. tall

153. Garrya do. , 2-5 ft. tall

154. Juglans do. , stream-margin, 10-15 ft. tall

155. Salvia do.

156. Umbelliferae do.

157. Geranium do.

158. Clematis do. , on bushes, climbing 6-8 ft.

159. Boraginaceae

160. Pinus edulis hillsides at Coppermines, small tree

161. Calliandra stony hills at Coppermines , stamens pale red

162. Eriogonum do.

163. Quercus do. , shrub or small tree, Aug. 5, 1851

164. Liliaceae Anthericum do.

165. Quercus do. , do.

166. Euphorbiaceae do.

167. Leguminosae do.

168. " do.

169. Oxalis do. , fl. purple

170. Calliandra do. , filaments pink

171. Mirabilis multiflora Nyctaginac. do.

172. Pinus do. , tree 10-20 ft. tall

173. Boraginaceae do.

174. Delphinium do.

175. Verbena do.

Grant County, New Mexico

176. Compositae stony hills at the Coppermines August 5, 1851

177. Oxalis do.

178. Silene do.

179 Rubus mountain-sides at Coppermines August 6, 1851

180. Acacia stony hills at the Coppermines

181. Stellaria mountain sides at the Coppermines

182. / Allionia incarnata
Nyctaginac. stony hills at the Coppermines

183. Portulaca do. , fl. deep orange-yellow

184. " do. , fl. light yellow

185. Talinum do.

186. Galium do.

187. Heuchera mountain-sides at the Coppermines

188. Solidago do.

189. Carex do.

190. Eutoca Phacelia congesta do.

191. Philadelphus do. , much branched, 2-5 ft. tall

192. Portulaca

193. Cruciferae mountain-tops at the Coppermines

194. " do. , fl. light purple, much branched, 2-5 ft.

195. Malvastrum stony hills at the Coppermines, fl deep orange

196. Asclepias do.

197. Erigeron do.

198. Quercus hypoleuca Engl. sides & summits of mountains at the Coppermines

199. Erigeron do.

200. Nyctaginac. Oxybaphus Coccineus do. August 8, 1851

201/ Salvia sides of mts. at the Coppermines

202. Symphoricarpus do. , 3-4 ft. tall, much branched

203. Ribes do. , 3-5 ft. tall

204. Prunus do. do.

205. Pinus do. , 50-80 ft. tall, 10-24 in. diameter

Grant County, New Mexico

206. Fraxinus sides of mts. at the Coppermines, small tree, 10-20 ft. tall Aug. 8, 1851

207. Spiraea do. , slightly branched slender bush 6-10 ft. tall

208. Heuchera do. , among rocks

209. fern Woodsia Plummerae do. , rock crevices

210. " do. do.

211. " Do. do.

212. " do. do.

213. " hillsides at the Coppermines, rock-crevices

214. Hepaticae under wet rocks on mountain side near Coppermines

215. Muci do.

216. " do.

217. " do.

218. Cyperaceae do.

219. Caryophyllaceae Arenaria saxosa Gr (G.no.865) stony hills at the Coppermines August 11, 1851

220. Actinella do.

221. Monarda valleys at the Coppermines

222. Cruciferae do.

223. Leguminosae stony hillsides at the Coppermines, prostrate or climbing on bushes, root very long fusiform subligneous

224. Dichondra stony hillsides at Coppermines, among fallen leaves under trees

225. Compositae valley at Coppermines , much branched from root

226. Boraginaceae do.

227. Lepidium stony hills at Coppermines

228. Eriogonum Abertianum do. , August 12, 1851

229. Amaranthaceae (Guilleminea) do.

230. Mimosa do.

231. Lathyrus do.

232. Physalis do. Aug. 11, 1851 ?

233. grass mountain-sides at Coppermines ??

234. " Panicum pampinosum margin of mountain-torrents near the Coppermines Aug. 13, 1851

Grant County, New Mexico

235. grass Muhlenbergia Emerel. top & sides of mountains at Coppermines Aug. 13, 1851

236. " do.

237. "Arenicl do.

238. "Eragrostis do.

239. Muhlenberg do.

240. Panicum bulbosum sides of torrents near the Coppermines

241. " on mountains near the Coppermines

242. " in ravines near the Coppermines

243. Ptilochaenium on mountains near the Coppermines

244. Muhlenbergia in ravines near the Coppermines

245. " do.

246. Helianthus summit of mountains near the Coppermines

247. Cyperus do. ,in beds of declivities.

248. Allium summits & sides of mountains near Coppermines

249. (omitted)

250. Malvaceae do.

251. Salvia sides of mountains near Coppermines

252. Polygonum sides of mountain-torrents near Coppermines

253. Pentstemon mountain-sides near Coppermines

254. Acalypha in detritus at sides of mountain torrents near Coppermines

255. Caryophyllaceae do.

256. " do.

257. Euphorbia do.

258. Cyperus do.

259. " do.

260. Commelyna stony hillsa at the Coppermines August 15, 1851

261. Hosackia do.

262. grass Ptilochaenium do.

263. Compositae do.

264. Hymenopappus do.

Grant County, New Mexico

August 15, 1851

265. Phaseolus stony hills at the Coppermines, prostrate, root very large over 2 ft. long 5 in. thick at the crown subligneous astrigent

266. grass Sporobolus stony hills at the Coppermines

267. Phlox nana valley of Coppermine Creek August 18, 1851

268. Caryophyllaceae stony hills near the Coppermines

269. Gilia congesta valley of Coppermine Creek

270. Convolvulus hills of Coppermine Creek, edge of thickets

271. Cucurbit. do. , climbing bushes

272. Salvia stony hills of Coppermine Creek

273. Bidens do.

274. Hymenatherum do.

275. Nyctaginac. Oxybaphus do.

276. Convolvulus do. , edge of thickets

277. " do. , do.

278. Desmodium do.

279. Physalis do.

280. Lathyrus do.

281. Scrophulaceae Scrophularia coccinea Gray Type mts. at the Coppermines, near their summit at base of rockyledges

282. Cruciferae near summit of mts. at the Coppermines

283. Solanum do. , fl. purple

284. " do. , & abundant in valleys, fl. white

285. Nicotianae mts. at the Coppermines, base to summit, fl. purple

286. Hymenatherum do. , summits & sides, fl. radiate or rayless

287. grass Lycurus do. , near the summit

288. " Eragrostis do. do.

289. Bromus do. do.

290. " do. do.

291. Erigeron do. do.

292. Desmodium do. , branching from root, branches procumbent

293. grass Setaria (no 2999) do. , near summit in dense bunches

Grant County, New Mexico

294. Micromeria near summit of mountains at Coppermines August 18, 1851

295. Malvaceae sides or mts. & valleys at the Coppermines

296. Petalostemon do.

297. Gratiola margin of mountain-torrents at Coppermines

298. Euphorbia stony hills at the Coppermines, August 19, 1851

299. Sanvitalia do. , and in valleys

300. Convolvulus do.

301. " do.

302. grass do.

303. Phaseolus do.

304. Gilia Maccambri do. , procumbent, branching from root

305. Euphorbia on stony hills near the Coppermines Aug. 20, 1851

306. Astragalus pebbly bed of stream near Coppermines and on pine hills, prostrate and much branched

307. Hymenatherum stony hills near the Coppermines

308. Euphorbia do. (with no. 305)

309. " do. do.

310. Portulaca do. do.

311. Eutoca Phacelia neomexicana do.

312. Cucurbit. do. , climbing on bushes

313. Nyctaginac. Mirabilis multiflora do. , large bunches, much branched

314. Oxybaphus nyctag. v. puber do. do.

315. Aster do.

316. Oenothera creek-margin at Coppermines, 2-3 ft. tall, fl opening in morning

317. " stony hills near Coppermines, fl. open in morning, withering early

318. Allium do. , fl. nodding, light purple

319. Euphorbia do.

320. " valley of creek near Coppermines, alluvial soil, Aug. 22, 1851

321. Cyperus on pine-hills near the Coppermines

322. Oenothera in valleys near the Coppermines (equals 322?)

323. Castilleja bed of creek near the Coppermines

Grant County, New Mexico

August 22, 1851

324. Oenothera sandy bed of creek near the Coppermines, (equals 322?)

325. Polemoniaceae do.

326. Euphorbia pine hills near the Coppermines

August 23, 1851

327. Cyperus hills near the Coppermines (equals 321?), damp places

328. cruciferae mountains near the Coppermines

329. Nyctaginac. hills near the Coppermines, in AM. fl open till 9-10 oclock

330. Oxybaphus do. do.

331. Cyperus do. , in damp places.

332. Leguminosae do.

333. Caryophyllac. mountain-sides near the Coppermines

334. Sanvitalia do. , under overhanging rocks

335. Heuchera rock-crevices in mts. near the Coppermines

336. Silene do.

337. Polygala mountain-sides near the Coppermines

338. Compositae do.

339. grass hills near the Coppermines

340. Scrophulariac. do. , very abundant, Aug. 26, 1851

341. Caryophyllac. do. do.

342. Cassia do. do.

343. Euphorbia do.

344. Molluga do. August 27, 1851

345. grass Sporobolus do. , very abundant

346. Poa Eragrostis neomexicana do.

347. Erigeron do. , common

348. Artemisia do. , andiin valleys, common.

349. Eriogonum do. , very growing thicklyin small patches

350. " do. , in small compact bunches

351. Solidago do.

352. Galactia do.

353. Solidago do.

at noon on Aug 27th Commissioner Bartlett's party, accompanied with that of Lieut.Col. Graham(which included Wright), left the Coppermines. They made towards 10 miles the first day.

On the 28th. they stopped an hour at Pacheteju for water and camped at Ojo de Vaca that night. Pacheteju is evidently "Apache de hoo" of Wright, and Bartlett, I;242, says it is the first watering place out of the Coppermines (a depression in plains which in addition to springs received the water after rains). It is 13 miles to the Mines, acc. to Bartlett. It is now called Apache Tejo, and is 3½ mi. due north from Whitewater, Grant Co.

Ojo de Vaca is 19 miles from Pacheteju, acc. to Bartlett, l.c., who says it is only a depression in the plain surrounded by a couple of acres of grass, and resembles an oasis in the desert. It is south and somewhat west of Whitewater near the Grant-Luna county-line, 6-7 mi. south of the extreme NW. corner of Luna County. It is now called Cow Springs. This was an important point in travel in southern New Mexico. From Ojo de Vaca roads went north to the Coppermines, west into Arizona, southwest to Guadalupe Pass, and south to Janos in Mexico.

From Ojo de Vaca the road went due west across the open plain to a spur of the Burro Mts. "12 mi. brought us to this mountain, when the Mexican lancer said that by turning up a canyon or defile to the northward, we should find an excellent spring of water, and that none would be met with again for about 40 miles. We accordingly left the trail and ~~follows~~ followed him. In a short time we entered a narrow and picturesque defile thickly wooded with scrub-oaks. This we followed about 5 mi., when it opened upon a beautiful grassy meadow about 300 yards wide, in which were many fine springs. Here we encamped [the night of Aug 29th]..." Bartlett 1: 361-2. This camp is Ojo de Gavilan. It is probably just within Grant Co., at the south end of the Burro Mts, ca. 10 mi. ~~S.~~ NE. of Lordsburg, near the Grant-Hidalgo county-line

Note Concerning this expedition to Santa Cruz, Sonora, Bartlett, 1:355-405, has the most detailed account. Graham, 27-47, is briefer and less helpful. Graham give a daily record for the trip out to Santa Cruz, but dismisses the return trip in a few lines. It should be noted that Thurber, was the botanist connected with Bartlett's

354. Gomphrena viridis Amaranthaceae hills near the Coppermines August 27, 1851

355. Boerhaavia purpurascens Nyctaginac. do.

356. Phaseolus do.

357. Verbena do. , around thickets.

Aug. 28, 1851

358. Lobelia marshy margin of Apache de hoo and elsewhere, not rare

359. Astragalus at Ojo de Vaca

360. Orobanchaceae do. , parasite on grass-roots

Aug. 29, 1851

361. Rhamnus at Ojo de Gavilan (hawk spr.) branching 4-6 ft. high

362. Portulaca near Ojo de Gavilan, fl. ochreous-yellow

363. Kallstromia grandiflora do. , in valley below

364. Portulaca do. do.

365. Nyctaginac. Boerhaavia erecta do. do.

366. Euphorbiaceae do. , in branches descending from the hills

367. Compositae do. do.

368. grass do. do.

369. " Bouteloua do. , on grassy hills

370. Compositae do. do.

371. Cuscuta do. , in the valley below

372. grass do. , on rocky hills August 30, 1851

373. " do. do.

374. " Helaria do. do.

375. " Astragalus do. do.

376. " do. do.

377. Dieteria do. do.

378. Eragrostis mexicana grass do. do.

379. Hymenatherum do. do.

380. Quercus summit of mountains west of Ojo de Gavilan

381. Poa Eragrostis mex. do.

382. " Eragrostis do.

Hidalgo County, New Mexico & Cochise County, Arizona

After leaving Ojo de Gavilan the morning of Aug. 30th. the "course was west to the southern [?northern?] point of a short mountain range" This might be the range of mountains extending south from Lordsburg but if so then the party must have skirted their north-end! "The country was quite rough and intersected with deep gulleys. On passing this mountain (the range above mentioned) we descended by an easy and gradual slope to a vast plain, uninterrupted by hills, and bounded on the west by a high range of mountains about 25 miles distant. North and south there were no mountains to obstruct the view. Our guide here pointed out to us El Peloncillo, or Sugar Loaf, a mountain of this form in the high range alluded to, with an opening near it, where he said General Conde was encamped. He told us we should find no water until we reached there, which it seemed impossible to do before dark" Bartlett 1:363-4. A storm in the afternood slowed up travel and the party camped on the plain that night, having travelled almost all day in Hidalgo County, New Mexico.

August 31st. the party moved to a watering place at the foot of El Peloncillo where General Conde, the Mexican Commissioner, was to have met them. This is Condes Camp, of Wright's list, and it was about 6 miles northeast from Steins, in extreme middle-western Hidalgo County, N.M., close to the Arizona-New Mexico line. The party remained here in camp during Sept. 1st.

September 2nd, the party passed into Arizona at Stein Pass and southward travelled (south) to the creek in San Simon Valley to Sauz de Cienega (Willow Marsh, El Sauce, or Saucera de la Cienega). This seemed "to be the basin where the waters collected from the adjoining mountains and slopes. Here was a great abundance of water, which, from the rushes that grew on its margins I suppose to be permanent. Grass was also plenty here", Bartlett1:371. This watering place is San Simon Cienega on the the Arizona-New Mexican line 10-12 mi. south of the S.P.R.R. The party probably camped at the north end which is a mile or so within Arizona. Cf. Water Supply Paper 425A.

September 3rd. generally westerly over low, flat, boggy ground intersected by ravines and small running streams. Going very difficult and slow; only 12 miles made. Had to camp on plains a few miles from mountains; no water. ~~Probably~~ At northeast foot of Chiricahua Mts.

September 4the "continued our journey along the base of mts. (northerly); the road still heavy, with frequent arroyos.....As we drew near to the mts. we discovered water gushing from their sides. We therefore haulted.... At 1 oclock we turned short to left and entered a narrow defile with perpendicular sides, and soon found ourselves in a beautiful ampitheater among mts." Here they camped in what is apparently the east ascent to Apache Pass, betw. the Dos Cabezos and Chiricahua mountians, still in Cochise County, Arizona.

383. Martynia summit of mountains west of Oja de Gavilan August 30, 1851

384. Scrophulariac. margin of dry torrent westward from Ojo de Gavilan

385. Malvaceae valley from Ojo de Gavilan to Condes Camp

386. Heliomeris margin of torrents from Ojo de Gavilan to Condes Camp stems numerous

387. Amarantaceae valley between Ojo de Gavilan and Condes Camp Aug. 31, 1851
amaranthus obcordatus

388. Malvaceae hillside at Condes Camp

389. Eriogonum polygaladum bed of mountain torrent at Condes Camp September 1, 1851

390. Cucurbit. prairies betw. Coppermines & Condes Camp, loose sandy soil root large fleshy, branches prostrate running 10-20 ft.

391. fern mountain-side near Condes Camp

392. " do.

393. Micromeria do.

394. Galactia do.

395. Labiatae do.

396. Salvia do. , many stems from root, 2 ft. tall

397. Compositae do. , branching widely

398. Compositae mountain summit near Condes Camp, rock-crevices

399. grass do. , in small tufts

400. Artemisia do.

401. Allium do. , fruit erect.

402. grass Bouteloua radicosa mountain-sides near Condes Camp

403. Chenop. Atriplex obovata valley from Condes Camp to Sauz de Cienega (Willow Marsh) Sept. 2, 1851

404. atriplex acanthocarpa do.

405. Solanac. valley from Sauz de Cienega towards Chiricahui Mts. Sept. 3, 1851

406. Boraginaceae do. , Sept. 4, 1851

407. Calliandra do. , stony soil

408. Compositae do. , do.

409. Boraginaceae do. , do.

410. Nyctaginac. (Bigelovia erecta) side of Chiricahui Mts.

411. Phaseolus do.

412.

Cochise County, Arizona

September 5th, after a night in what is probably the east ascent to Apache Pass, they proceeded westward over the mts. "we moved forward. and found the mts. more difficult to pass than any we had encountered before, consisting as they did of continuous hills, which required much care on the part of the teamsters; yet, with locking the wheels 2 or 3 times, and a little assistance by hand, we soon got thru. The length of the pass, with all the sinuosities of our route, did not exceed 3 miles. On emerging from the opposite side a broad plain again opened to our view as before, with a range of mts. bordering its western side, about 35 mi. distant, and running parallel to those we has just left. ... A dry lake appeared about midway in the plain" Bartlett 1: 373-4. The moved west across the plain and camped south of Wilcox Playa, in central Cochise County, Arizona.

Remained at camp south of Wixcox Playa the nights of Sept. 5, 6 & 7.

Note. Bartlett gives the latitude & Longitude of several camps which he states were determined by Lieut. Whipple, one of the party. These seem to be several minutes off, judging from modern maps.

Camp of Aug.31st at base of Piloncillo (Condes Camp)
lat.32°20' 21" ; long. 109° 01' +4

Camp of Sept. 2nd., Sauz de Cienega
lat.32°05' 09";long.109°02'06"

Camp. of Sept. 3rd., San Simion Valley
lat.32°08'33";long.109°11'32"

Camp. of Sept, 4th 'Chiricahui Mts", i.e. Apache Pass
lat.32°08'43" ;long.109°24'33" - 2

Camp. of 5-7th., south of Wilcox Playa
lat.32°02'38" ;long.109°48' 54". ± 2

Camp. of Sept.8-9, San Pedro near Benson
lat.31°54'31" ;long.110°11'41" - 1-4

Roughly estimating from these figures on the basis that one minute equal one mile we get the the following directions & distances travelled each day, -

Sept. 2nd.	15 mi. S & 1½ mi. W.	to Sauz Cienega
Sept. 3rd.	3 mi. N & 8 mi. W.	to near mts.
Sept. 4th.	a bit N. & 13 mi. W.	to Apache Pass
Sept. 5th.	6 mi. S & 24 mi. W.	to Wilcox Playa
Sept. 8th.	8 mi. S.& 22 mi. W.	to San Pedro River

412. Labiatae side of Chiricahui Mts.,many stems from root, Sept.4, 1851

413. Nicotiana do.

414. Onograceae bed of a mountain torrentamong pebbles,many stems from one root

415. Compositae sides of Chiricahui Mts.

416. Leguminosae do.

417. Nyctaginac. do. September 5, 1851

418. Boerhaavia erecta " do.

419. Gilia do.

420. Compositae Pass of the Chirichui Mts,much branching near the ground

421. Petalostemon do.

422. Mentzelia do.

423. Crotolaria do. , in valleys

424. Asclepiad. Valley west of Chiricahui Mts., climbing on plants,entangled

425. Martynia do. , sandy soil

426. Cleomella low saline valley west of Chiricahui Mts Sept. 6, 1851
much branched near the ground

427. Cleoma low saline valley west of Chiricahui Mts.

428 Diateria do. ,in sandy soil

429. Compositae do.

439. Chenopod. Atriplex obovata) Hoz. do. ,on sandy ridges

431. Cyperus damp soil along branch west of Chiricahui Mts

432. grass Sporobolus valley west of Chiricahui Mts on sandy ridges

433. Baileya do.

434. Cassia do.

435. grass do.

436. Dieteria do.

437. Wislezenia do.

438. grass do.

439. Franseria do.

440. Dieteria do.

Sept. 8th. party moved west to the east bank of the San Pedro River. The route followed is almost certainly that of the present highway between Cochise and Benson and passes thru the pass in the Dragoon Mts. Their camp was very near the present site of Benson, Cochise County, Arizona.

The party remained on the San Pedro River, near the site of Benson, thru the 9th and 10th.

440. Dieteria valley west of Chiricahui Mts , subsaline soil Sept. 8, 1851

441. Chrysopsis do.

442. Cryptantha albida do. , sandy soil

443. Lepidium do. do.

444. (Allionia incarnata
Nyctaginac. do. do.

445. Euphorbia do. do.

446. Aristolochia do. do.

447. Phaseolus do. do.

448. Euphorbiaceae do. do.

449. grass Erioch[illegible] valley descending to the San Pedro, sandy soil

450. " Cottea do. do.

451. Chrysopsis d[illegible]. do.

452. Leguminosae bed of creek descending to the San Pedro, among pebbles and coarse sand, fl. purple

453. Euphorbia bed of creek descending to San Pedro River

454. Petalostemon valley of a creek descending to San Pedro River, fl. white, sandy soil

455. Evolvulus do.

456. Convolvulus do. , fl. purple

457. Helianthus sandy soil
do. , sandy soil

458. Malvaceae do. , sandy soil, fl. blue

459. Desmodium do. , sandy soil, fl. purple

460 to 468 ("omitted by mistake")

469. Tragiopsis do. , among pebbles, fl. purplish

470. Condalia side of canyon descending to the San Pedro, fl. green-yellow much branching 4-6 ft. tall

471. Leguminosae side of canyon descending to San Pedro, fl. purple climbing on bushes

472. Oenothera On steep banks of San Pedro, much branching, fl. purple

473. Ribes on the banks of the San Pedro, sparingly branched, 2-5 ft. Sept. 9, 1851

474. Aster banks of the San Pedro

Cochise County, Arizona

On Sept. 10th Bartlett started for Santa Cruz, Sonora, and on the Sept. 11th Graham's party (with Wright) set out following Bartlett's track. The route led south on the west side of the San Pedro River. "Our course continued due south thru thick mesquite chaparral,--, After marching about 18 mi. the trail turned abruptly to the west, along the base of some high detached hills; these we followed about 5 miles and camped near a water hole" Bartlett 1: 381-2. Graham following this route made only 10 miles of it on the 11th. of Sept.

Sept. 12th. Graham made scarcely 18 miles generally south. This would place them in the San Pedro Valley a bit southwest of Fairbanks

Sept. 13th. following Bartlett's trail (Bartlett was lost) the route led over broken country generally southwest towards the Huachuca Mts. They made about 15 miles.

475. Compositae banks of the San Pedro September 9, 1851

476. " low banks of the San Pedro , 2-4 ft. tall

477. Ambrosia do. , 1-2½ ft. tall

478. Erythraea do.

479. algae on naked aluminous soil of the San Pedro Sept. 10, 1851

480. Euphorbia low damp soil near the San Pedro

481. Chenopodiac[illegible] Atriplex Wrightii Wats. do.

482. Helianthus do.

483. Aster do.

484. Cuscuta do. Sept. 11, 1851 , on Ambrosia & Helianthus

485. Dieteria alluvial lands near the San Pedro

486. Physalis prairies of the San Pedro

487. Verbenaceae mountain valleys betw. the San Pedro and Santa Cruz, Sept. 12, '51. alluvial soil

488. ~~Amaryllidaceae~~ Milla biflora do. , stony soil

489. Rubiaceae do. , rocky places

490. Krameria do. , stoney soil

491. Diodia do. , stony soil

492. Malvaceae do. , stony soil

493. Compositae do. , bed of small stream

494. Desmodium do. , banks of small stream

495. Malpighiaceae do. , stony places, much branched from the root

496. Amaranthaceae mt. valleys bet. the San Pedro and Santa Cruz, 2 ft. high bed of small branches

497. Dipteracanthus mountain valleys towards Santa Cruz, stony soil, many stems

498. Hymenatherum do.

499. Convolvulus do. , root tuberous Sept. 13, '51

500. Leguminosae do. stony soil , under oaks, many stems from the root

501. Heliomeris Valleys of Sonora, stony soil, many stems from one root

502. Apocynaceae Valleys of Sonora on hillside

Cochise County, Arizona

Sept. 14th., still following Bartlett's tracks, heading southwesterly towards the Huachucas, over rough and broken country, Graham's party made less than 10 miles.

Sept. 15th caught up with Bartlett (going probably less than 10 miles) who was camped in a canyon near an abandoned Ranch. This is probably at the base of the middle of the east side of the Huachuca Mts. in southwestren Cochise County. According to Bartlett, 1:391, this " was a noted cattle hacienda known as Calabasa" and had been abandoned because of the indians. Wright remained here Sept. 16th.

Cut of. Bartlett 2:307.

Note Wright called the stream upon which this deserted hacienda was located "Sonoita Creek" If this is correct it is certainly not the Sonoita Creek in Santa Cruz County, Ariz., which runs along the south and southwest base of the Santa Rita Mts. The Sonoita Cr. of Wright is clearly a stream flowing east from the east side of the Huachuca Mts and is in SW. Cochise County.

What Wright called the Valley of Sonora is the country west of the San Pedro River and east of the Huachuca and Whetstone mountains. It is all in Arizona and in western Cochise County.

September 13, 1851

503. Compositae Valleys of Sonora, in alluvial soil along branches

504. Evegrostis vaginex. grass (Poa) do. do.

505. Dalea do. do.

506. Astragalus do. ,alluvial soil, procumbent, many stems from root

507. Eryngium do. ,along branches

508. Leguminosae do. ,procumbent 1-2 ft. high many stems Sept. 14, 51

509. Compositae do. ,along branches

510. Cyperus do. do.

511. Muhlenbergia Wrightii grass do. do. ,in small compact bunches

512. Compositae do. ,branching from root

513. Chrysopsis do. ,few branches from root

514. Cirsium do. ,in branches, 3-5 ft. tall, branching near top

515. Bidens do.

516. Lathyrus do. , low land along branches

517. Phaseolus do. ,in branches; climbing 2-4ft. high on weeds & bushes

518. Dieteria valley of a mt. stream, the Sonoita, alluvial soil, 2-4 ft. high, branching above

519. Scrophulariac. do. ,shrubby 2-5 ft. high, forming small thickets

520. Oenothera do. ,low lands, 2-4 ft. Sept. 15, 1851

521. Petalostemon do. ,5 mi. above Deserted Ranch

522. Labiate do. ,hillsides near Deserted Ranch

523. Compositae on the Sonoita near Deserted Ranch, much branching from root

524. Euphorbia do. , on hills

525. Leguminosae do. ,banks of mt. torrents

526. Tragia do. do.

527. (Commicarpus Nyctaginaceae do. ,rocky hillsides, fl. green-yellow.

528. Verbenac. do. ,fl. blue

529. Cuscuta do. ,whole plant very white

530. Ambrosia? do. ,hillsides & creek-valleys

531 Cassia do.

Cochise Co., Arizona

September 16th remained in camp at east base of Huachuca Mts.

September 17th started to back-track and camped near where they had on night of Sept. 14th.

September 18th. camped on the Babocomari near a ruined hacienda of the same name. This deserted rancho, abandoned because of indians, is 7 miles west along the Babocomari from the San Pedro River, fide Bartlett 1: 396. Graham thought their former camp on the San Pedro (i.e. Benson) was about 25 miles N.NE. from the abandoned ranch.

On present maps the Babocomari River is the principal west fork of the San Pedro in Cochise Co. Heading in the country between and a bit west of the Huachuca and Whetstone mountains it flows generally east joining the San Pedro at Fairbank, a railroad and highway following most of its course. I am not sure that this is the stream on which Wright camped, but the probabilities are that it is, rather than the other possibility, the smaller stream flowing from the Huachucas and joining the San Pedro 6-7 miles further south.

Wright remained in camp at the abandoned ranch on the Babocomari the 19th, 20th and 21st.

532. Euphorbia on the Sonoita near Deserted Ranch September 15, 1851

533. Euphorbiaceae do. ,among rocks, 1-2ft. high, Sept. 16, 51

534. Leguminosae do. ,on hillsises, branching

535. Euphorbia do. ,pebbly bed of branches

536. Platanus do. ,mt.-streams, large tree

537. Cnidoscolus do. ,hillsides, 1-2ft. high, branching

538. Abutilon do. ,hillsides, 1-4ft high, slightly branching

539. grass Coltea do. ,small tufts

540. Malvaceae? do.

541. Cuscuta do. ,climbing widelyon Nyctaginac.& other plants Sept. 17, 1851

542. Boraginaceae do. ,low valley among tall weeds & grass, 2-4 ft. high, fl. greenish yellow.

543. Desmodium on the Sonoita near Deserted Ranch, low valley among tall weeds

544. Leguminosae do. ,on hills, procumbent, branching from root.

545. Tephrosia do. ,much branching from root

546. Galactia do. ,sides of mt.-ravines

547. Compositae do. ,shade of trees on sides of mountain-ravines

548. Polygala do. ,stony hills

549. Solanum do. ,under scrubby trees on side of mt.-ravines

550. Desmodium do. ,sides of mountain-ravines

551. " do. do.

552. " do. do.

553. Convolvulus do. ,sides of mt.-ravines, fl. blue-purple

554. Compositae do. ,sides of mt.-ravines

555. Hymenatherum do. do.

556. Amaranthaceae Gomphrena do. do. ,fl.red.

557. Compositae do. do.

558. " do. do.

Cochise and Santa Cruz counties, Arizona

Camping on the Babocomari near the ruins of the "Hacienda de Babocomari" the night of Sept. 18th., the party remained there thru the 19th, 20th and 21st.

Now having guides who knew the direct route to Santa Cruz, the party started for Santa Cruz the AM. of September 22nd. going west around the north end of the Huachucas. "Set off once more for Santa Cruz, recrossing the stream, and passing around the northwestern extremity of the Sierra. Our course was then due south to a range of hills, thru the valley of which we we pursued our way among scattering live oaks which greatly impeaded travel. .....At 5oclock, encamped among hills in a thick wood near a small rivulet." fide Bartlett 1:400. "Before we encamped, ~~[illegible]~~ we entered a very rough hilly region, covered with ~~[illegible]~~ oak and thick undergrowth, which impeded our wagons very much. We encamped for the night among these hills, upon a pretty little stream which af afforded water enough for the animals and ourselves" fide Graham, pg.44.

About the middle of the day on Sept. 23rd the party crossed the Cochise-SantaCruz county-line. They camped that night in Santa Cruz County, at the NW end of the Huachucas.

September 17, 1851

559. Desmodium deserted ranch on Sonoita , sides of mt-ravines, rock-crevices

560. ------ do. do. , fl. yellow turning to red.

561. Fallugia hills near deserted ranch, 6-10 ft. tall with short stout branches

562. Rhus near deserted ranch on sids of mt.-ravines

563. Ionidium? do.

564. Cyperus near deserted ranch on hills

565. Hosackia valley of Sonoita Creek, low damp soil among tall grass

566. Ludwigia pool-margins in mt.-valleys descending to the San Pedro Sept. 18, 51

567. Cyperaceae do.

568. " do.

569. Naiadaceae do.

570. Lobelia do.

571. Onagraceae pebbly bed of mt.-branch descending to San Pedro

572. Cassia do. , 2 ft. tall

573. Rutosma mountain-side near the San Pedro

574. Hosackia hills near the San Pedro, many stems from root

575. ----- mt.-side near the San Pedro, 2-4 ft. tall, much branched

576. Dalea hills near the deserted ranch

577. grass pool-margin in mountain valleys

September 19, 1851

578. Cuscuta margin of Barbocomori at deserted rancho, [illegible], on Salix

579. Scutellaria do. , fl. light blue

580. Samolus do. , fl. white

581. Aster banks of Barbocomori at deserted ranch, fl. pale bluish purple

582. Leguminosae margin of Barbocomori at desert. ranch, fl. yellow, Sept. 20, 1851

583. Umbelliferae do. , fl. white; in water

584. Dalea hillside near the Barbocomori Sept. 22, 1851

585. Cuscuta do.

586. Dalea hillsides from Barbocomori towards Santa Cruz

587. Petalostemon do.

588. Heliotropium do. , in rocky detritus

Santa Cruz County, Arizona, south into Sonora

September 23rd. Having camped at the northwestern end of the Huachucas the party crossed the divide into the headwaters of the Santa Cruz River and proceeded southward along it (west of the Huachucas) to ~~the present~~ Santa Cruz, a town in northern Sonora, 10 miles south of the boundary.

Graham, pg. 44-5, states "We had some difficulty getting our wagons over this range of hills, and they were a good deal racked by the roughness of the ground. About 10 oclock we reached the head of the beautiful valley in which Santa Cruz is situated.....Our course has been generally very nearly south since we left the Babacomari; we made some easting to get over the broken hills, then resumed very nearly our former course....We reached this village about 4 oclock"

Bartlett, 1:401, states "Resumed our march at 8 oclock, our course still south, thru a wood quite difficult for the waggons. A few miles brought us to the puerta, or gate in the mountains; passing which we emerged into a very broad and open plain of remarkable beauty...Opposite from where we stood [at the puerta], and not more than 5 miles distant, were the mountains and gorges, where we had encamped for 5 days, endeavoring to find ~~the~~ a passage thru. At the further end of the valley into which we were descending, lay Santa Cruz"

Wright's collections dated Sept. 23rd. were probably all collected before he reached Santa Cruz and probably all from within Santa Cruz County, Arizona,

Sept. 22, 1851

589. Diodia hillside from Barbocomori towards Santa Cruz, in rocky detritus

590. grass Hackelochloa do.

591. Crotolaria do.

592 Dalea or Petalostemon do.

593. Pectis valleys from Barbocomori towards Santa Cruz

594. Dalea hills from Barbocomori towards Santa Cruz

595. Bidens margin of branch from Barbocomori towards Santa Cruz

596. Compositae From Barbocomori towards Santa Cruz , hills

597. Gentiana do. , springs

598. Habenaria do. , do.

599. Pentstemon do. , hills, oak-hills

600. Cirsium do. , margin of dry branches oak-hills

601. Compositae do. , hillsides, oak-hills

602. " do. " "

603. " do. " "

604. Leguminosae do. " "

605. Compositae oak hills from Barbocomori towards Santa Cruz, hillsides, suffruticose 2-3 ft, high, much branching

606. Gerardia? oak hills from Barbocomori towards Santa Cruz, hillsides, fl. yellow, many stems from root.

607. Compositae hills from Barbocomori towards Santa Cruz, September 23, 1851 many stems from root.

608. grass Sporobolus do. , in bunches

609. fern do. , rock-crevices

610. " do. do.

611. Leguminosae do. , sandy soil

612. Calliandra do. do.

613. Zornia do. do.

614. Compositae do. , sandy soil along branches

615. Caryophyllac. do. , branching from root

616. Compositae do.

617. D

Santa Cruz, Sonora
ca. 10 miles south of the Arizona border.
The party reached Santa Cruz at about 4 oclock on the 23rd.

They remained in Santa Cruz till the morning of the 28th.

617. Desmodium hills from Barbocomori towards Santa Cruz, procumbent, stems 2-4 ft. long, Sept. 23, 1851

618. Aster Valleys near Santa Cruz, low damp soil

619. Helianthus do. do.

620. Aster do.

621. Hypericum do. , in springy place

622. Gentiana do. do. , fl white yellowish when dry.

623. --- along branches in hills near Santa Cruz

624. Diodia prairies near Santa Cruz September 24, 1851

625. Leguminosae bed of mountain torrents near Santa Cruz, many stems from root, 2-4 ft. tall

626. Gnaphalium bed of mt.-torrent near Santa Cruz, 1-2 ft. tall, many stems from root

627. Hydrocotyle margin of creek at Santa Cruz, in dense patches

628. Cyperus do.

629. Compositae pebbly bed of mt.-torrent at Santa Cruz, 2-5 ft. tall

630. " mountain-ravine at Santa Cruz, in rock-crevices, branching from root.

631. " Do. do. do.

632. Physalis do. , rocky detritus

633. Diodia do. do.

634. Euphorbia do. do.

635. Aralia do. , rock-crevices, 2-4 ft. tall

636. Rubiaceae do. , 1 ft. tall, fl. scarlet

637. Dalea do. , branches 2-3 ft. long

638. Cucurbita do. , among rocky detritus

639. Thalictrum do.

640. Desmodium do. September 25, 1851

641. Petalostemon mountains near Santa Cruz

642. Compositae mt.-ravines at SantaCruz, 4-6 ft. tall, branching at top

643, Vitis do. , 8-12 ft. climbing small trees

Santa Cruz, Sonora

The journey back to the Coppermines in New Mexico began the morning of September 28th.

Until the party reached Agua Prieta on Oct. 2nd they travelled just south of the Arizona-Sonora boundary.

There is no published journal for this trip back to the Coppermines. Graham, pg. 47, states that he left Santa Cruz at noon on Sept. 28th and arrived at the Copper Mines on Oct. 10th.

NOTE From Santa Cruz (with Thurber) Bartlett travelled south in Sonora finally sailing from Guaymas for California. However a description of the route travelled by Wright, may be found in Bartlett's Narrative, 1:245-260 &2: 320-333, for he made the trip from the Coppermines via Ojo de Vaca and Guadalupe Pass to Agua Prieta from May 18-22, 1851; and from Santa Cruz east to beyond Guadalupe Pass between July 28th and Aug. 4th, 1852.

September 25, 1851

644. Compositae mountain sides near Santa Cruz, 1-3 ft., branching from root

645. " do. do. do.

646. Helianthus do. , 2-3 ft., do.

647. Passiflora *inamoena* Hp do., , 2-4 ft. long, climbing among rocks

648. Salvia leja do. , 1-2ft tall, branching from root

649. Castilleja do.

650. Heuchera do.

651. Nyctaginac. do.

652. Petalostemon hills at Santa Cruz, branching from root

653. Dracocephalum low creek-bottom at Santa Cruz, 1-2 ft. tall, growing very thickly

654. Compositae mt.-ravines at Santa Cruz, much branching fromtthe ground

655. " do.

656. grass *Eriadba* do.

657. Sida prairies at Santa Cruz, fl. yellow, small, open 9-11 AM. Sept. 26, 1851

658. Mentzelia mountain ravines at Santa Cruz September 27, 1851

659. Helianthus sides of ravines at Santa Cruz, 2-3ft tall, few stems from root

660. grass *Setaria Greenbachii* do.

661. (Crassulaceae *Sedum aff. Wrightii* do. , rock-crevices, fl. white, red within.

662. Heliomeris do. , many stems from root

663. Asclepiadac. do. do.

664. Compositae do. do.

665. Galium do. , rock-crevices, dense bunches

666. " do. do.

667. Compositae do.

668. Ludwigia margin of mountain torrents at Santa Cruz

669. Scrophulariac. do. , fl. yellow.

670. Caryophyllac. mountains east of Santa Cruz September 28, 1851

671. Ionidium do.

~~672. A~~

adjacent Sonora and Arizona

Until the party reached Agua Prieta on Oct. 1st. they had been travelly in Sonora just south of the Arizona border. Near Agua Prieta they again crossed into what is now Arizona (Cochise Co.) and travelled eastward to beyond Guadalupe Pass just north of the Sonora-Arizona boundary. The abandoned hacienda of San Bernardino is definately in southernmost Cochise Co., Ariz., on the international boundary

672. Ammania along mountain torrents east of Santa Cruz Sept. 28, 1851

673. " do. , with last.

674. Cyperus do. September 29, 1851

675. Salvia mountains east of Santa Cruz

676. Galium do. , trailing 2-3 ft.

677. Compositae do. , perennial?, branching, 1-2 ft. tall

678. " do. , 3 ft. tall, biennial?

679. Heliomeris do. , 2 ft. tall, perennial

680. fungus do. , on decaying twigs

681. Scrophulariac. do. , along rivulets

682. Leguminosae branches of the San Pedro, open prairies Sept. 30, 1851

683. Compositae do. , rocky banks

684. Caprifoliaceae do. do.

685. Hymenatherum do., , open prairies, introduced? Oct.1st.'51

686. Perezia do. do.

687. Convolvulus do. , prostrate, many branches spreading 4-6ft. from perennial root.

688. Malpighiaceae heads of the Agua Prieta, among rocks

689. Cassia do. , shrubby 4-6 ft. tall, much branched & spreading.

690. Hymenatherum do. , perennial, very much branching, October 2, 1851

691. Acacia do. , broad level valleys, 6-12 ft. tall, sparingly branched

692. " do. , broad level valleys, 2-5 ft. tall, much branching

693. Zinnia do. , very much branching perennial

694. Convolvulus do. , open till afternoon.

695. Cuscuta at San Bernardino October 3, 1851

696. Cyperus do. , around springs

697. Aster low valley at San Bernardino

698. Helianthus do.

699. Euphorbia do.

Arizona-

Guadalupe Pass is on the New Mexican line a few miles north of the Mexican boundary.

Las Animas Valley is in SW. Hidalgo County, New Mexico. The old road from Guadalupe Pass goes north along the length of the valley, crossed the low northern ridge of the Las Animas mts. northeastward to waterholes just west of the huge dry-lake (Playa). From near the Playa the road strikes off NE to Ojo de Vaca, a stretch of over 50 miles without water.

It is almost certain that all the plants which Wright lists under the dates of Oct. 5th., 6th. and 7th. were collected in Hidalgo County, New Mexico.

The party probably camped west of the Playa the night of Oct. 7th. The night of the 8th, after the long dry trip northeast across the south prolongation of Grant County (where no. 738 was probably collected), they camped at Ojo de Vaca near the Grant county-line in NW Luna County. This would permit the party to reach the Coppermines on the 10th. Compare notes given on itiniary for Aug. 28, 1851.

For a description of the Las Animas Valley and La Playa see Water Supply Paper no. 422.

700. Cirsium Wrightii n.sp. around springs near San Bernardino, 3-9 ft. tall, October 3, 1851

701. Malpighiaceae Guadalupe Pass, on mountains (equals 688?) Oct. 4, 1851

702. ~~Lycopodium~~ Selaginella rupincola do. , on rocks

703. Compositae do. , rock-crevices, many radical branches

704. Eysenhardtia do. , on mountains, 2-4 ft. tall

705. Malvaceae do. do.

706. Euphorbia do. do.

707. Malvaceae do. do.

708. Labiatae do. do. , 2-5 ft. tall, much branching

709. Echinocystis Clotarium Wrightii n.sp. do. do. , climbing 4-6 ft.

710. Polygala do. do. , many radical branches

711. Echinocystis Cyclanthera dissecta do. do. , climbing 4-7 ft., pepo bursting elastically & projecting seeds.

712. Scrophulariac. do. do. , many radical branches

713. Apocynaceae do. do. , rock crecives

714. Compositae Arbacoa lanceolata n.sp. do. do. , 1 ft. high, very much branching

715. " do. do. , rock-crevices, 1-2 ft. tall

716. Phaseolus do. do. , twining 1-2ft. high Oct. 5, 1851

717. Nyctaginac. Mirabilis oxybaphoides do. do. , ravines, prostrate, branches 1-3 ft. long.

718. Compositae do. do. , very much branched

719. " do. do. , rock-crevices

720. Chenopodium Chenopodium graveolus do. do. , mountain-side

721. Loranthac. Phor. Bolleanum do. do. , on cedar

722. Compositae do. do. , mountainside, many branches from the root.

723. Juncus Valley of the Sierra de los Animos, margin of springs

724. Cyperus do. do.

725. Aster do. , stream-margin, Oct. 6, 1851

726. Artemisia do.

727. Polygonum do. , do.

728. Curcubicateae do. , in rocky canyon

Cyclanthera parryflorus

New Mexico

see previous page

October 6, 1851

729. Euphorbia Valley of the Sierra de los Animos, pebbly bed of dry creek

730. Galium do. , in springs, ascending 2-3 ft. on clubrushes.

731. Leguminosae do. , in springs

732. Hymenothrix Wrightii Compositae do. , 1½-3 ft. tall, common in Sonora

Oct. 7, 1851

733. " near Sierra de los Animos, pebbly creek-bed, 4-6 ft. tall erect, branching.

734. Chenopodiaceae prairies of the Sierra de los Animos, 1-2 ft. tall, much branching.

735. Compositae Las Playas springs, in subsaline soil, forming large patches

736. Aster Engelmanni do. do.

737. Eryngium Las Playas, around springs

738. Hymenatherum praries between Las Playas and Coppermines October 8, 1851

739. Verbena mountain sides at the Coppermines October 11, 1851

740. Cosmidium do. & Guadalupe Pass

741. Euonymus do.

742. Dieteria do.

743. grass Bromus do.

744. " do.

745. " Sporobolus do. , small dense tufts

746. " Blepharoneuron do.

747. " Poa Eragrostis Mexicana do. , do.

748. Compositae do. , one or more stems from root.

749. Aster do.

750. Solidago do. do.

751. Amaranthus Wrightii do.

752. Solidago do. , stems mostly single

753. Compositae do. , large patches under trees

754. Polygala do.

755. Erigeron do. , stems one to several

- Grant County, New Mexico

With no. 762 Wright begins to refer to the Coppermines as "the Cobre". This is still the coppermines at Santa Rita del Cobre, it is a change of name but not in location.

756 Dalea? Hillsides at the Coppermines October 11, 1851

757 " ? do.

758. Gentiana do. , stems one to several

759. Caryophyllac. do. , under bushes

760. " do.

761. " do.

762. " mountain-sides at Cobre, under rocks, branches prostrate 1-2 ft. long.

763. Compositae do. , among rocks, large bunches 4 ft. tall much branched

764. " do.

765. Dalea? do. October 13, 1851

766. Aster do.

767. Artemisia do.

768. Phaseolus do. , annual, much branched, branches prostrate

769. Artemisia do.

770. Silene do. , rock crecices, compact bunches

771. Heuchera do. do. do.

772. Nyctaginac. do. , 1-2 ft. tall, branching

773. grass Muhlenbergia do. , small dense bunches

774. " (Poa) do.

775. " Melica Porteri do.

776. " Eragrostis Neomex. do. , base of rocky cliff

777. Psoralea mountain-sides at the Coppermines, several stems, much branching

778. Compositae do.

779. " do. , one to several stems

780. " do. , small compact bunches in rock-crevices.

781. grass Muhlenbergia do. , small dense bunches

782. " Muhlenbergia do. do.

783. Gnaphalium do.

784. Physalis do.

Grant County, New Mexico

785. Compositae mountain sides at the Coppermines, October 13, 1851

786. moss do.

787. grass valley of Coppermine Creek, in small bunches, Oct. 15, 1851

788. Cirsium do. ,2-3 ft. tall, branched

789. Blepharipappus do. ,rocky shady cliffs

790. Pectideae do. do.

791. Juncus margin of Coppermine Cr.

792. Helianthus? valley of Coppermine Cr., under trees, 2-4 ft. tall

793. " do. do. do.

794. Artemisia do. , around thickets

795. Bidens? do. ,under trees & bushes

796. Helianthus do. ,around trees & bushes, 1-3 ft. tall

797. Bouteloua eriopoda grass hills around the Cobre, in small bunches October 16, 1851

798. Andropogon do. do.

799. "Eragrostis do.

800. Muhlenbergia do. ,in dense bunches

801. Muhlenbergia Do. ,in small bunches

802. Muhlenbergia Do. ,small thin bunches

803. "Andropogon. do. ,small dense bunches

804. "Aristida do. do.

805. Aristida do. do.

806. Muhlenbergia do. do.

807. "Andropogon scribnerianus do. do.

808. "Sporobolus do.

809. "Aristida do. ,in small bunches

810. "Aristida do. do.

811. " Valleys around Cobre ,under trees

812. " (Poa) Eragrostis reverchonii. do. ,on soil burnt by fire

813. "Blepharoneuron hills around Cobre

814. Muhlenbergia gracilis do. ,small dense bunches, October 17, 1851

Grant County, New Mexico

815. Muhlenbergia grass | hills around Cobre , in small dense bunches , October 17, 1851

816. " do. do.

817. " do. do.

818. Artemisia Valleys around Cobre

819. " do. and on hills

820. Cyperus hills around Cobre

821. Eleocharis do.

822. Loranthaceae do. , on cedars in dense bunches

823. Dalea pebbly bed of mountain torrent near Cobre

824. Gnaphalium Hills around Cobre October 18, 1851

825. Artemisia dracunculoid. do. and in valleys, common

826. Sorghastrum grass mountain valleys around Cobre, in tufts not dense

827. moss ravines near Cobre, on burnt ground

828. Bulbostylès hills around Cobre, suffruticose much branched 3-4 ft. tall

829. " do. , stems several 2-3 ft. tall

830. Woodsia mexicana do.

831. Pteris do.

832. Acalypha mountains around Cobre October 20, 1851

833. Aster do.

834. Artemisia do.

835. Malvaceae do. , on summits, 1-2 ft. high, divaricately branching.

836. Cyperus margin of mt.-torrents near the Cobre

837. moss do. , large thick bunches

838. Elatine do. , often under water

839. Cosmos mountains around the Cobre

840. Compositae do. , called Anis by Mexicans

841. " do.

842. Artemisia do.

843. Gaura do.

844. Artemisia do.

Grant County, New Mexico

845. Sedum Wrightii mountains around the Cobre, on rocky ledges October 20, 1851

846. Compositae do.

847. Pteris Pellaea Wrightiana Hook do. , rock-crevices

848. grass Muhlenbergia depauperata do.

October 21, 51

849. Artemisia filifol. valley of Coppermine Creek, 2-4ft. tall, branching

850. grass Sporobolus Wrightii do. , large dense bunches

851. Helianthus valley of Coppermine Cr., 2-4 ft. much branching

852. " do. , 3-6 ft. tall, much branching

853. " do. , 2-4 ft. tall, much branching

854. chara branches of Coppermine Creek

855. Compositae hills near the Cobre

856. grass Phragmites valley of Coppermine Creek, 2-4 ft. tall

857. Chenopodium Fremontii do. , shade of trees

858. Cosmos? do. do.

859. moss mountains near the Cobre, on rocks October 23, 1851

860. Sambucus do. , among rocks, 6-10 ft. tall

861. fern Woodsia Plummerae do. , under overhanging rocks

862. Rubus do. , among rocks, 3-5ft. tall much branching

863. Populus do. , small slender tree with very smooth white bark.

864. Aristida? do. , in small tufts

865. Arundo do. do.

866. grass do.

867. " Lycurus do. do.

868. " Panicum bulb. do. do. , in ravines

867bis " do. , cumms mostly simple

868bis fern do. , rock-crevices

869 Juncus do.

870. fern hills from the Cobre to the Mimbres, tufts under rocks Oct. 25, 51

871. Oxytropis do. , side of ravines

872. Senecio canescems do. do.

on the 25th of October Wright evidently went over the road to the Mimbres valley 10-15 miles east of the Coppermines and perhaps stayed until the 27th.

873. Populus margin of the Mimbres, tree 10-30 ft. tall, October 25, 1851

874. Helianthus valley of the Mimbres

875. Populus margin of the Mimbres, tree 15-25 ft. tall

876. Agrostis do., in small thick tufts

877. Aster? bottom of the Mimbres, in thickets of bushes

878. " do. do.

879. Eutoca do., fl. white, 3 ft. tall

880. Bromus do.

881. Vilfa valley of the Mimbres, small tufts

882. Aristida do., rather large tufts

883. " do. do.

884. " do., small tufts

885. Smilacina do., shade of thickets of bushes

886. Humulus margin of the Mimbres, climbing on small trees

887. Alnus do., tree 10-20 ft. tall, branches nearly horizontal from near ground upwards.

888. Astragalus pine hills from the Mimbres to the Cobre, procumbent

889. Helianthella? do.

890. Andropogon do., large patches with scattered culms.

891. " " do.

892. Pinus mountains near the Cobre, 20-40 ft. high, October 27, 1851

893. " do., 15-30 ft. tall, 10-24 in. diameter

894. " edulis do., 8-50 ft. tall, 6-20 in. diameter

895. " do., small tree

896. Lupinus do., ascending 2 ft. tall, spikes in fruit often more than a foot long.

897. Achillea mountain ravines near the Mimbres

898. Delphinium do.

899. Abies do., tree 60 ft. tall, 2ft. diameter

900. Compositae do.

901. Gilia aggregata do., 1-2 ft. high

The hot springs mentioned by Wright, Nov. 2nd., are evidently the hot springs near the Mimbres, mentioned by Bartlett 1:225, and given as about 18 miles from the Coppermines. These are now known as the "Mimbres Hot Springs" and are in Grant County.

collections up to and including no. 922 are all, probably, from Grant County.

Cookes Spring (near old Ft. Cummings) is in northern Luna County

Mule Spring is probably in southern Sierra County, cf. notes for July 31st, 1851.

902. Leguminosae pine hills betw. the Cobre and the Mimbres ,October 27,1851

903. Pinus do. ,tree 50 ft. high &1-2 ft. diameter

904. " pine hills at the Cobre(equals last?,if so very variable) October 28, 1851

905. Juniperus do. ,tree 10-20 ft. tall,1-4 ft. diameter

906. grass bottom of Coppermine Creek November 1, 1851

907. Juniperus hills of Coppermine Creek

908, chara branches of Coppermine Creek

909. Callitriche do.

910. grass Andropogon virg. around the hot springs November 2, 1851

911. " Sorghastrum do. , wet soil, culms scattering

912. " Aristida purpurea do. & common elsewhere

913. " Bouteloua eriopoda. do. do.

914. " Andropogon virg do.

915. Hymenatherum do. & elsewhere on stony soil

916. Euphorbiaceae bottom of the Mimbres in sandy soil

917. Compositae hills from the Mimbres to Rio Grande & eastward

918. grass valley of the Mimbres, in dense bunches

919. Compositae low bottom of the Mimbres

920. grass Muhlenbergia do. ,in small bunches

921. Compositae do. , 4 ft. tall

922. Polygonum punctatum bed of the Mimbres in water

923. Ambrosia hills near Cookes Spring

924. Gnaphalium do. ,among rocks

925. Chrysopsis do. do.

926. grass Heteropogon do. do.

927. " Aristida do. do.

928 " do. do.

929. Artemisia do. do.

Collections of Nov. 4th, 5th & 6th. were made after reaching the Rio Grande(probably) at Santa Barbara (cf. notes forJuly 30 &31 1851). Judging from the usual speed in travelling this stretch of Rio Grande Valley,most of these collection were probably made above Las Cruces. They are all certainly from Dona Ana County, New Mexico.

930. Baccharis bottom of Mule Spring creek November 3? (or 2?), 1851

931. Muhlenbergia? grass ravine at "Hole-in-rock" November 3, 1851

932. "Setaria (no 2093) do.

933. Boraginaceae do.

934. grass hills from the Cobre to the Rio Grande, common Nov. 4, 1851

935. Compositae bottom of Rio Grande on sandy ridges

936. Aristida purpurea do.

937. Stipa? Oryzoides do.

938. Vilfa? Sporobolus do.

939. Compositae do. , forming dense thickets 1-4 ft. high.

940. Vilfa? Sporob. flexuosus do.

941. " Sporobolus Wrightii do. , dense tufts

942. grass Muhlenbergia repens around springs

943. Vilfa? Sporobolus bottom of the Rio Grande on sandy ridges

944. Sporobolus do.

945. Panicum virgatum margin of the Rio Grande November 5, 1851

946. Muhlenbergia asperifol. grass bottom of the Rio Grande in sandy hollows

947. Vilfa? Sporobolus bottom of Rio Grande in sandy soils

948. Sporobolus do.

949. Muhlenb. Porteri grass valley of Rio Grande, among bushes on hills & in valleys November 6, 1851

950. Aristida purpurea do. , on hills

951. Dalea do. , on sandy hills

952. Compositae low valleys of the Rio Grande, in large bunches.

List for 1851-52 - third part.

1. moss Prairies of Rio Grande below San Elizario, under bushes Feb. 1852
2. Lichen do. , on naked sandy soil
3. " do.
4. Crucifera Prairies of RioGrande below San Elizario & in thickets on sandy soil
5. Boraginaceae Hills of Rio Grande below San Elizario, stony ridges, fl. light blue March 1852
6. " do. do. , fl white
7. Oenothera do. do. , fl. yellow
8. fungi do. , in sandy soil
9. alga do. , sandy soil, spreading on ground
10. lichen Sandy hills of the Rio Grande below San Elizario, March, 3, 1852
11. " do. , on the ground
12. fungi do. do.
13. lichen do. do.
14. " do. do. (equals no. 13?)
15. Crucifer stony hills of RioGrande below San Elizario.
16. fungi sandy hills of the Rio Grande below San Elizario.
17. moss do. , without fruit
18. fungus do.
19. Lepidium Wrightii var do.
20. Draba cuneifolia stony hills of the Rio Grande below San Elizario
21. Crucifer sandy hills of the Rio Grande below San Elizario
22. Myosurus low bottoms of Rio Grande at San Elizario March 14, 1852
23. Corydalis sandy hills of the Rio Grande
24. (Boraginaceae Cryptantha micrantha do.
25. Eutoca Phacelia caerulea stony hills near the canyon leading to San Antonio
26. Hymenathera do. March 20, 1852
27. Gilia rigidula var do.
28. Vesicaria do. ,and in valleys, abundant

Texas along the Rio Grande

Late in 1851 Graham was recalled to Washington and Wright was transfered (in Nov.) from the corp of naturalists to the Engineers and put to work surveying the Rio Grande. In his letter to Gray dated Jan.25,52, he says, "Since he left (Graham, early in Dec.51) I have surveyed the Rio Grande from San Ignacio thirty miles below this place(San Eleazario) to the canyon where the San Antonio road first strikes the river"

San Ignacio is on the Mexican side of the river about 7 miles below the Mexican town of Guadalupe and about 5 or 6 miles up river from the point where the ElPaso-Hudspeth county-line hits the Rio Grande

San Elizario is in El Paso County near the Rio Grande ca. 20 m. S of ElPaso

The canyon leading to San Antonio from the Rio Grande is in the Quitman Mts. ~~near~~ 6 miles below old Fort Quitman and is in Hudspeth County

concerning Graham's period of attachment to the Boundary Survey
see Bartlett, Narrat. 2: 545

March 20, 1852.

29. Ephedra stony hills near canyon leading to San Antonio, 2-5 ft. tall, much branched.

30. Crucifer "new Streptanthus" do.

31. "Galium [illegible] v. effusum" do.

32. Boraginaceae do.

33. crucifer do. , equals no. 15

34. Lycium? do. ,2-4 ft. tall, much branching, tube of corolla white, margin yellowish green.

35. Plantago stonybhills near canyon leading to SanAntonio

36. Gilia minima naked alluvium near canyon leading to San Antonio, fl. light purple

37. Eriogonum abertianum stony hills near canyon leading to San Antonio, March 21, 1852, fl. yellowish red.

38. Epilobium? (Oenothera sp.) do. , do.

39. Eutoca do. , fl. purple

40. Compositae do. , many stems from root, perennial, fl. purp.

41. Cereus do. ,fl. vermillion, ribs 8-12, branching, stamens purp., stigmas yellowish green.

42. Compositae "Erigeron cinereum var." sandy ridges along the Rio Grande March 22, 1852.

43. Euphorbia low bottoms of Rio Grande

44. Gilia longiflora sandy ridges along RioGrande , fl. purple

45. Nyctaginac. (Abronia Torreyi) do. , fl. red-purple

46. Astragalus do. March 26, 1852 .

47. Compositae stony hills near Frontera ,fl. light reddish

48. Anisocoma sp? do. do.

49. Vesicaria do.

50. Allium do. , fl. red

51. ~~Microm~~ "Hedeoma" do. , fl. purple March 27, 1852

52. Astragalus do. do.

53. Compositae "Malacothrix sonchoides" do. , fl. yellow

54. "Townsendia strigosa" do. , fl. reddish white

55. Polemoniaceae do. , fl. light purple

56. Compositae "Aphanostephanus humilis?" do. dp.

Frontera is on the Rio Grande just north of El Paso
in El Paso County, Texas

see notes for July 26th, 1851.

Collections of March 30th, made across the RioGrande from Frontera
are from the extreme southeast corner of New Mexico, Dona Ana Co.

57. Eutoca stony hills near Frontera, fl. light purple March 27, 1852

58. Polemoniaceae do. do.

59. Baileya do. , fl. yellow

60. Polemoniaceae do. , fl. white tinged with pink

61. Astragalus banks of acequia near El Paso

62. " do.

63. Gilia do.

64. Dipteracanthu stony hills near El Paso

64bis Compositae do. , fl. light red, equals no. 54

65. Vesicaria do. , fl. purple

66. Polygala do. do. , March 29, 1852

67. Micromeria do. do.

68. Eutoca do. do. equals no. 57?

69. Boraginaceae valleys between hills near Frontera, fl. white

70. Ephedra stony hills near Frontera, 3-6 ft, much branching

71 Perezia do. , fl. light purple

72. Apocynaceae do. , much branched from root, tube greenish purple, limb white.

73. Rhus do. , 2-4 ft. high, much branching

74. Dalea do. , 1-2 ft. high, much branching, keel & wings purple, banner yellowish tinged with purple

75. Compositae do. , much branched from base

76. Lupinus sandy ridges across river from Frontera March 30, 1852

77. Apocynaceae do.

78. Rumex do. , 2-3 ft., many stems from root, perennial.

79. Compositae rocky ridges across river from Frontera

80. Boraginaceae do.

81. Condalia do. , 2-3 ft, much branching

82. Hymenatherum do.

83. Compositae do.

84. " sides of stony ridges near Frontera March 31, 1852

El Paso County, Texas

"Astragalus Nuttallianus"
85. Leguminosae stony valleys near Frontera March 31, 1852

86. Echinocactus do.

87. -------? stony hills near Frontera, fl. very light purple

88. Echinocactus do. , 2-6 in. high, fl. red

89. Sidalcea do. April 1, 1852.

90. Compositae do.

91. Townsendia bottom of Rio Grande near Frontera

"Erigeron cinereum var."
92. " hills of the Rio Grande near Frontera

93. Astragalus stony hills of the Rio Grande near Frontera

94. Mamillaria do. April 2, 1852

95. Cereus do. ,simple or mostly branched,
fl. yellowish green.

96. Lathyrus mountain ravines near Frontera April 3, 1852

97. Anemone do. , fl(apparently) white.

98. Micromeria mountain sides near Frontera , fl purple

99. Verbena do. , fl. light purple

100. Euphorbia do.

101. Compositae do.

102. Rutosma do. ,~~2-4 ft. tall, much branched, fl. white~~

103. Fendlera do.

104. Rhamnaceae do. ,2-4 ft. tall, much branched,fl. white.

105. grass mountain ravines near Frontera

106. fern mountain sides near Frontera, rock-crevices

107. Boraginaceae do. , fl. yellow

108. Gaura do. , fl crimson

109. Erigeron do. , fl. light purple

110. Parietaria do. ,under rocks

111. Physalis do. ,fl. yellow within,purple & yellow
without.

112. grass hills near Frontera

113. Erodium do. , fl. purple

El Paso County, Texas

114. Ranunculus sand bars of the Rio Grande , fl. yellow April 5, 1852

115. Mentzelia mountain sides near El Paso, fl. diurnal, small, yellow

116. " do. , nocturnal, yellow

117. Lepidium do.

118. Chryseis(spell???) do. , among rocks

119. Senecio river bottom near Frontera April 7, 1852

120. Vesicaria hills near Frontera April 8, 1852

121. Mammillaria mountain near Fronteram on or near summit

122. Eutoca sand hills near Frontera, fl. light purple

"Selagenella mutica"

123. Lycopodium summit of mountains near Frontera, dense tufts under rocks, April, 10, 1852

124. Actinella do.

125. Acanthaceae sides of mts. near Frontera, much branched from perennial root

126. lichen summit of mts near Frontera, red, on north face of rocks

127. " do. , yellow, do.

128. " do. , greenish, do.

129. " do. , yellow, do.

130. " do. , green, do.

131. " mountain side near Frontera, on stems of Ephedra, green

132. " do. do. , whitish

133. " do. , loose rocks, white.

"[illegible]"

134. Eriogonum hills near Frontera, stony ravine April 12, 1852

135. Krameria do. , very much branched from root

136. Acanthaceae sandy valleys near Frontera

137. Senecio valley of RioGrande near Frontera, common in sandy soil Apr.14, '52

138. Oenothera s stony hills near Frontera , fl. nocturnal

139. lichens do. , under overhanging rocks

140. " do. do.

141 " do. do.

142. Townsendia valleys near Frontera April 15, 1852

143. Gilia stony valleys near Frontera, fl. veyy light purple, tube yellow

Chihuahua, Mexico (April 17th and following)

Cimieluque this is a phonetic rendering of Samalayuca (other renderings of this name in the writings of the Boundary Survey are, Cemialauke and Samalayurca). This is a famous water place due south of El Paso on the main road to Chihuahua City. Samalayuca Springs are a mile or so south of the present town of Samalayuca, Chihuahua, 30-35 miles from El Paso.

The "sandhills between El Paso and Chihuahua" are obviously the famous dunes, medanos, between Samalayuca and Candelaria.

Wright's locality, "the Salado" has not been located. There is no Rio Salado on any map I can find. The road Wright took probably went south on the main Chihuahua City road to about Candelaria, about 15 mi. south of Samalayuca, and then turned southwest for 10-15 mi., then west to the Rio Santa Maria which flows north into Lake Santa Maria.

Parry, in Emory Rep. Mex. Boundary vol. 1, pt. 2: 10-11, probably travelled the same road from El Paso to the Rio Santa Maria. He gives a description of the country traversed.

Bartlett, Nar. 2:368-379, describs his journey from the Rio Santa Maria, via the Salado, the Medanos and Samalayuca, to El Paso and gives many details concerning the country. He states that the medanos begin about 2 mi. S. of Samalayuca, are 8 mi. broad, and that the Salado, ("Salt Lake, from 2 to 4 mi. across") is about 30 miles SW after the dunes are crossed. Some pools of fresh water near the Salado is the nearest water west of Samalayuca. From the Salado (generally SW) it is about 25 mi. to the Rio Santa Maria. The Salado must be at or near the settlement called Amorgosa on modern maps. is the Salinas de la Union and the springs near by are near the town called La Union on modern maps.

April 15, 1852

144. Gilia stony valleys near Frontera, fl. very light purple, tube white

145. Townsendia do.

146. Linum stony hills near Frontera

147. Gnaphalium alluvial valley near El Paso -- road to Chihuahua April 17, 1852

148. Heliotropium Greggii do. do. , fl. white, greenish yellow in throat.

149. Oxytropis do. do. , fl. purple

150. Nasturtium margin of Cimieluque on road to Chihuahua

151. Funaria do.

152. Ribes do. , 6-8 ft., branching

153. Comandra on sandy hillrocks El Paso/ to Chihuahua

154. Foriestiera do.

155. Lemna Cimieluque Spring, 35 miles from El Paso

156. Hydrocharis do.

157. Salvia sandhills between El Paso and Chihuahua

158. Lepidium rocky hills 50 miles from El Paso towards Chihuahua Apr. 18, 1852

159. Compositae sandhills between Cimieluque Spr. and the Salado.

160. Evolvulus between Cimieluque Spr. & the Salado, fl. white, anthers purple

161. Cereus do. , fl purple, branches few

162. Dieteria valley of the Salado, betw. ElPaso & Chihuahua, fl purple

163. Spharalcea pedalifida do. , fl. light purple

164. Oenothera valley betw. the Salado & Lake Santa Maria April 19, 1852

165. Chenopod. do.

166. Veronica do. , in low places

167. Cereus do.

168. " hills betw. Salado and Lake Santa Maria

169. Astragalus valley betw. the Salado and Lake Santa Maria

170. Erigeron do. , fl. white purple beneath

171. Eriogonum abertianum foot of hills towards Lake Santa Maria, fl purple

172. Nyctaginac. Selinocarpus chen. do.

Chihuahua, Mexico

"the Santa Maria" is the Rio Santa Maria which drains north into the south end of Lake Santa Maria.

Lake Gusman (Guzman of modern maps) is over a low divide and about 10 mi. northwesterly from Lake Santa Maria.

From Lake Guzman the party appears to have gone east to the Chihuahua Road and then back to El Paso.

173. Lathyrus banks of the Santa Maria , fl purple April 19, 1852

174. grass do.

175. Geranium do.

176. Leguminosae do. ,fl. white Cal. blue purple

177. Euphorbia do.

178. Senecio do.

179. Nicotiana do. , fl. purple

180. grass base of hills near the Santa Maria

181. Castilleja banks of the Santa Maria

182. Apocynaceae dry mt. torrent descending to Lake Santa Maria, April 20, 1852
fl. white, tube green, many stems from the root.

183. Compositae mt.-side near Lake S. Maria, much branching at ground

184. Streptanthus do. , fl purple

185. Sphaeralcea do. , near the summit

186. Euphorbia do. ,(here I planted a butcher-knofe)

187. Lathyrus do.

188. Arabis do. , white

189. " mt.-tops near Lake S. Maria

190. Eutoca mt.-sides near Lake Santa Maria, fl. purple, under overhanging rocks.

191. Daucus do.

192. Umbelliferae do.

193. grass margin of Lake Santa Maria

194. Micromeria stony plain near Lake S. Maria, fl. pyrple

195. Compositae shore of Lake Gusman April 21, 1852

196. Malvaceae do.

197. lichen plains betw. Lake Gusman and Frontera, on mesquite bushes

198. " do. do.

199. Phaca sandhills betw. Lake Gusman & Frontera

200. Asclepias do. April 23, 1852

201. Tauschia do.

The collections of Apr. 23rd. are from Chihuahua, Mexico

Frontera, near El Paso, Texas, Apr. 24th, 26th & 27th.

Camp Fillmore (now in ruins) is several mi. east of the Rio Grande, about 7 miles SSE of Las Cruces, near the present highway between Las Cruces and El Paso. It is in Dona Ana County, New Mexico. Bartlett, Narat. 2:390-94, visited Ft. Filmore and the adjacent Organ Mts. in Sept. 1852. and describes the fort and the mts.

202. Astragalus sandhills between Lake Gusman & Frontera April 23, 1852

203. Apocynaceae near Lake Santa Maria ; equals 182

204. fungi sandhills between Lake Gusman & Frontera

205. Cereus hills near Frontera, among stones and rocks, fl. yellow Apr., 24, 1852

206. Asclepias do. , and in low bottom, fl. purple, crown-lobes white

207. Rumex violascens margin of Rio Grande near Frontera

208. Evolvulus valley of Rio Grande near Frontera, fl. white, anthers purple

209. Salix nigra. do. , common, 10-20 ft. tall

210. Hymenopappus sandhills near Frontera April. 26, 1852

211. Ephedra do. , 2-5 ft. tall

212. Eriogonum rotundifolium do.

213. Ephedra do.

214. " do. , 1-3 ft. tall

215. grass Muhlenb. repens (& Oryzopsis no 1996) do. , in small tufts

216. Linum do.

217. Ephedra do. , 1~~0~~3 ft. tall

218. Echinocactus stony hills at Frontera , fl. purple April 27, 1852

219. Galium do.

220. Galardia do.

221. Gaura valleys ~~at~~ near Frontera , fl red.

222. Compositae hills ~~at~~ near Frontera

223. Talinum stony hills near Frontera , fl purple or red, small

224. Hoffmannseggia sandy valleys at Camp Filmore April 29, 1852

225. Abronia fragrans sandy hills at Camp Filmore, fl. white, tube greenish purple

226. Compositae do. , fl. white

227. " do. , an in Organ Mts.

228. Cereus do. , fl. purple

229. Eriogonum do. , fl. yellow

230. Senecio side of Organ Mts. , many stems from root

231. Umbelliferae do.

Organ Mountains east of old Ft. Fillmore
Dona Ana County, New Mexico

April 29, 1852

232. Cirsium Side of Organ Mts., 2-4 ft. tall, somewhat branching
233. grass do. , in small tufts
234. Rhus do. , in bunches, branching, 3-5 ft. tall
235. Castilleja do.

April 30, 1852

236. Ungnadia ravines of Organ Mts., 2-8 ft. tall, much branching
237. Galium do.
238. Orobanchaceae sandy banks in the Organ Mts., fl. yellowish
239. Amarynthaceae / Gomphrena caespitosa hillsides in the Organ Mts.,
240. Astragalus do. , fl. purple
241. Pentstemon do. do.
242. Compositae ravines in the Organ Mts.; fl. limb white, tube purple
243. Aquilegia do. , wet springy soil, fl. yellow
244. Labiatae do. , among bushes, fl. red-purple
245. Orobanch. do. , on steep banks
246. Hieracium sides of the Organ Mts., fl. yellow
247. Marchantia wet ravines in Organ Mts
248. Pentstemon ravine-sides of Organ Mts. one to several stems from root
249. lichen perpendicular rocks, Organ Mts.
250. Rhus ravines of Organ Mts., 2-5 ft. tall, branching
251. grass do. , in small bunches
252. lichen do. , on cedar branches
253. Caryophyllaceae do. , fl. white
254. Salix do. , along stream, 4-10 ft. tall
255. grass do. , near branches
256. lichen Organ Mts., on branches of Abies
257. Scroph. " , along streams , fl. purple
258. grass "
259. lichen " , on cedar branches
260. Abies " , 20-50 ft. tall
261. lichens " , branches of Abies

Organ Mts east of old Fort Fillmore, Dona Ana County, New Mexico
through April 30th.

then back to Frontera (near El Paso), Texas

262. Cruciferae ravines of the Organ Mts April. 30, 1852

263. grass ravine-sides of Organ Mts.,

264. Astragalus plains near the Organ Mts. , fl. purple

265. Lupinus do. do.

266. Euphorbiaceae hills at base of Organ Mts.

267. Ionidium do.

268. Lepidium ravines of the Organ Mts.

264bis Hosackia hills at base of Organ Mts. , fl. yellow

265bis Phlox do. ,fl. purple

266bis Compositae ravines of the Organ Mts.,1-2 ft. tall,much branched

267bis Cucurbit. do. ,fl. yellow

268bis Hypnum do. , wet

269. Erigeron sides of Organ Mts.

270. grass Rio Grande bottom May 2, 1852

271. Compositae do.

272. Chysopsis sandy valleys near Frontera May 3, 1852

273. Aphora stony hills near Frontera May 4, 1852

274. Salvia sandy valleys near Frontera, large thick bunches,1-2 ft. tall

275. Apocynaceae rocky ravines near Frontera, much branching from root

276. Compositae rocky hills near Frontera, do.

277. ~~grass~~ Blepharidachne Bigelovii do. , small compact bunches

278. Scrophular. do. ,fl. purple,1-2 ft. tall,much branched

279. " do. , fl. purple, spreading procumbent

280. " dp. ,fl. light purpleprostrate spreading

281. grass Aristida do. , in small tufts

282. Opuntia do. ,fl. yellow,yellowish within

283. Fouquiera do. May, 5, 1852

284. Heliotropium curassavicum Rio Grande bottom, spreading prostrate,fl. white May 6, 1852

285. Lepidium Rio Grande Valley, much branching, fl. white

286. Senecio low bottom of the Rio Grande at Frontera

El Paso County, Texas

287. Salix margin of the Rio Grande at Frontera, 6-10 ft. tall, May 6, 1852

288. Compositae hills near Frontera , fl purple

289. grass do. , in small tufts

290. Polygala do. , fl purple

291. grass do.

292. Cosmidium valleys near Frontera ,fl. yellow changing to purplish

293. Abronia cyclopteraxx do. , in sand, fl. purple

294. Erigeron Rio Grande bottom, Frontera , fl. light purple

295. Polygala Rio Grande valley, Frontera, on stony hills, fl purple

296. Micromeria Rio Grande bottom, Frontera , fl purple

297. Asclepias stony hills near Frontera , fl. light purple

298. Ayenia rocky ravines near Frontera, fl. dark red

299. Compositae stony hills near Frontera, fl. yellow

300. Dieteria do. do.

301. Solanaceae Rio Grande bottom, very abundant, fl. purple, 2-6 ft., much branching

302. Baileya sandy valleys at Frontera May, 10, 1852

303. Krameria stony hills near El Paso, prostrate, May 11, 1852

304. Dalea do. , fl purple

305. " do. , fl. yellow turning purplish

306. Tessaria Rio Grande bottom at El Paso, very abundant

307. Condalia hills near Frontera, 4-7 ft, much branching, with ripe fruit and flower- buds.

308. Hoffmannseggia Rio Grande Bottom near El Paso

309. Malvaceae do. , fl yellow

310. Astragalus sandy ridges at Frontera May, 15, 1852

311. Opuntia do. O. arenaria (LT) Fl. S, 335

312. Actinella Rio Grande bottom at Frontera

313. Melilotus do.

314. fungi on roots of the preceding

315. Portulacc. Rio Grande bottom at Frontera

316. Astragalus Rio Grande bottom near Frontera

EL Paso County, Texas

Frontera is a few miles above El Paso

San Elizario is about 20 miles down river from El Paso

317. Aster Rio Grande bottom near Frontera , fl purple, May 18, 1852

318. Aplotheca hills near Frontera

319. Acacia do. ,3-6 ft. tall,much branching

320. Scrophulariac. do. , 1-2 ft. tall

321. Wislizenia Rio Grande bottom near Frontera

322. Chilopsis pebbly bed of branch flowing to Rio Grande, 6-10 ft,branching

323. Teucrium low bottom of the Rio Grande, fl. very light purple or white

324. Polygala mountains near ElPaso, fl. purple, May 19, 1852

325. Compositae do. , fl. yellow,much branched from root

326. Paronychia do. , fl. yellow

327. Nicotiana do. ,fl. light yellow

328, Mortonia do. ,fl. white,much branched & spreading

329. Opuntia do. ,

330. grass margin of acequias at El Paso

331. Samolus Rio Grande bottom at El Paso, fl. very light purple

332. Opuntia on sandhills below El Paso

333. Solanum near San Elizario May, 25, 1852

334. Algarobia do.

335. grass do. , margin of acequia

336. Malvaceae do. , banks of acequias

337. Opuntia do. ,in RioGrande bottom,6-10 ft. tall, in small bunches, fl. purple.

338. Umbelliferae cultivated in gardens at San Elizario, fl. purple

339. grass old fields at San Elizario

340. " Andropogon saccar. do.

341. " do.

342, " margin of acequias at San Elizario

343. " banks of acequias at San Elizario

344. Samolus margin of ponds at San Elizario

345. Glycorhiza, Rio Grande bottom at San Elizario,1-3 ft, fl white Junel,1852

El Paso County, Texas

346. Medicago fields near San Elizario, introduced, fl. purple June 1, 1852
347. Rumex violescens around ponds near San Elizario
348. Juncus do.
349. Scirpus do.
350. Eleocharis do. June 2, 1852
351. " do.
352. " do.
353. Plantago do.
354. grass Rio Grande bottom near San Elizario
355. " do. , in shade
356. " Panicum [illegible] do.
357. " Sporobolus Wrightii do.
358. " " " do.
359. " Setaria (no 2994) do.
360. Gaura do. , 3-7 ft. tall
361. Marsilia low ground near San Elizario June 3, 1852
362. Distichlis grass do. , in water
363. Anemopsis do.
364. Potomogeton pectinatus do. , in running water
365. Chara do. , in stagnant water
367. Potomogeton do.
368. Dalea sandhills near San Elizario, branching, procumbent June 7, 1852
369. " do. , 2-3 ft, much branching
370. Paspalum distichum low ground near San Elizario June 9, 1852
371. Aster do. , 1-3 ft, much branched
372. Caryophyll. do. June 14, 1852
373 Nicotianacae do.
374. Baccharis do. , 3-6 ft. tall
375. Verbena do. , prostrate much branched
376. Rumex violaceus Old river near San Elizario, in water 2 ft. deep, 3-5 dt. tall

Probably all El Paso County, Texas

Wright's party must have left San Elizario for the return trip to San Antonio about June 17th. or 18th.

377. Scirpus Old river near San Elizario, in water, 6-10 ft. tall June 14, 1852

378. " do. do. , 6-8 ft. tall

379. Eleocharis low ground near San Elizario

380. Sambucus San Elizario, around houses, 8-12 ft. tall, 6-12 in. diameter

381. Compositae San Elizario, sandy soils, common, 1-3 ft. tall

382. Scirpus in old river near San Elizario, 3-4 ft. tall

383. Asclepias low ground near San Elizario , 1-3 ft. tall

384. Chenopodium leptophyl fields near San Elizario

385. aristida grass sandhills near San Elizario , in small dense tufts

386. Polygonum arc fields at San Elizario June 15, 1852

387. " P. ramosissima do.

388. Aster do.

389. Potomogeton pectinatus in old river 2 miles from San Elizario

390. Hydrocharis? do.

391. Sagittaria Lophotocarpus calycinus do. June 16, 1852

392. Cuscuta bottom of RioGrande on H. ciliatus, forming large patches

393, Panicum banks of old river below San Elizario

394. Obione Atriplex canescens sandy ridges on Rio Grande, 3-5 ft. tall, much branching June 17, '52

395. Yucca do. ,4-6 ft. tall

396. Euphorbiaceae sand hills on the Rio Grande, much branching from root

397. Obione Atriplex canescens bottom of Rio Grande, much branching

398. Compositae do.

399. Opuntia do. ,3-6 ft. tall

400. Helianthus Sand hills on the Rio Grande, 1-3 ft tall, lower branches horizontal.

401. Palafoxia do. , June 18, 1852

402. Euphorbiaceae do.

403. Liliaceae do. , fl. yellow

404. Compositae do. , fl. purple

405. Apocynum Rio Grande bottom, fl. white, 3-4 ft. tall June 19, 1852

406. Aster do. ,fl. purple

The collections of June 21st. are along the road from the Rio Grande through the Quitman Mts. to Eagle Springs (see notes for Aug. 30th & Sept. 1st, 1849) in Hudspeth County Texas.

June 22nd the party evidently moved on to Van Horne Wells in southwestern Culberson County, Texas (cf. notes for Aug. 30, 1849)

June 23rd the party probably passed into western Jeff Davis County ~~or certainly did so on the 24th.~~ camping at Rain Water Creek that night. (see notes for Aug 1849), Dead-man's Hole is evidently between VanHorne Well and RainWater Cr. ~~and perhaps may be the waterhole on Chispa Cr. (about 8 mi. south of VanHorne Wells near the Culberson-JeffDavis county-line.~~

Emory, Rep. Mex. Bound. Surv. 1:135 (1857), gives the following log of distances,-

San Elceario - 59.80 - last camp on Rio Grande - 31.42 - Eagle Springs - 19.74 - Van Horn's Wells - 32.83 - Dead Man's Hole - 13.58 - Barrel Spring - 18.42 - Fort Davis - 28 - Varela Springs - 33.86 - Leon Spr. - 8.88 - Comanche Spr.

These however do not agree with the log by French, see notes for Aug. 26, 1849, and make Wright's route for June 23, 24, 1852, unintelligible. How could Wright travelling, can't go from Van Horn Wells to Deadman to Rainwater Cr. to Rock Cr. other reasons!

407. Coreopsis Rio Grande bottom, in hollows, June 19, 1852

408. Erythaea do. do.

409. Scirpus do. , in water-holes

410. Cereus sand hills of the Rio Grande, densely caespitose

411. Leguminosae do. , 2-5 ft. tall, much branched

412. Koeberlinia sandhills along Rio Grande, 4-8 ft. tall, much branched

413. ------- ravines from Rio Grande to Eagle Springs, 2-3 ft. tall, June 21, 1852

414. ------- rocky ridges, Rio Grande to Eagle Sprs.

415. Condalia prairies from RioGrande to Eagle Springs, 4-6 ft. tall

416. Mammillaria do. , and along RioGrande, caespitose

417. Bernardia obovata hillsides, RioGrande to Eagle Sprs., 2-3 ft. tall, much branched

418. Euphorbiaceae valleys from Rio Grande to Eag e Sprs., procumbent, much branched from the root, fl. yellow

419. Krameria hills from the Rio Grande to Eagle Sprs., much branched

420. Heliomeris do. , much branched, 2-3 ft. tall

421. Opuntia hills near Eagle Springs, 2-3 ft. tall, much branched & spreading

422. Asclepiad. do. , climbing 2-4 ft. on bushes

423. Hedyotis do. , in crevices of rocks

424. Fraxinus ravines near Eagle Springs, 4-8 ft. tall, much branched

425. Actinella banks of branch between Eagle Sprs. & VanHorne's Wells, June 22, '51

426. grass do.

427. Heliotropium Greggii prairies, Eagle Spr. to VanHorne Wells

428. Cucurbit. do. do.

429. Euphorbiaceae valley betw. Eagle Sprs. & VanHorne Wells

430. Peteria do.

431. Ayenia in rock-crevices at Van Horne's Well June 23, 1852

432. Talinum prairies from VanHorne Well to Dead-man's Hole, fl. light yellow, vespertine.

433. moss from Eagle Springs to VanHorne Wells, rock-crevices on hills.

434. Leguminosae at Van Horne's Wells, on stony hills

435. Linum prairies from VanHorne Wells to Dead-man's Hole

probably all Jeff Davis County, Texas

See notes on localities for Aug. 1849

June 23rd Wright went from Van Horne Well to [illegible] Rain Water Creek

June 24th Wright went from Rain Water Creek to Rock Creek (Smiths Run)

June 25th Wright appears to have traveled from Rock Creek (or Smiths Run) to Painted Camp at the head of the Limpia.

436. Microrhamnus Prairies from VanHorne Wells to Deadman's Hole, June 23, 1852

437. Talinum do. , fl. orange

438. Lepidium do. , in prairie-dog towns

439. Asclepias do. do.

440. " do. do.

441. Eriogonum Abertianum do. do.

442. Polygala prairies from Van Horne Wells to Rain-water Creek

443. Thelypodium margin of Rain-water Creek June 24, 1852

444. Oxalis do.

445. Asclepias do.

446. grass do.

447. Cucurbit. prairies from Rain-water Cr. to Rock Creek

448 Krameria hills from Rainwater Cr. to Rock Creek

449. Baccharis prairies from Rain-water Cr. to Rock Cr., prairie-dog towns

450. Oxalis do. do.

451. Portulaca do. do.

452. Compositae do. do.

453. Actinella hills from Rain-water Cr. to Rock Cr., do.

454. Euphorbiaceae bed of a small dry creek

455. Boraginaceae hills from Rain-water Creek to the Limpio June 25, 1852

456. Leguminosae do.

457. " do.

458. Apocynaceae do.

459. Rhamnaceae do.

460. Vernonia banks of streams from Rain-water Cr. to the Limpio

461. Mimosa hills from Rain-water Cr. to the Limpio

462. Galium do. , and banks of Rock Cr.

463. ----- banks of Rock Creek

464. Talinum paniculatum do. , fl. yellow

465. Malvastrum hills of Rock Creek

Jeff Davis County, Texas

466. Calliandra hills near Rock Creek June 25, 1852

467. Asclepiad. do. , fl green

468. Hosackia do. , fl. yellow

469. Lonicera banks of a torrent between Rock Cr. & the Limpio, 3-5 ft. tall

470. Cerasus do. , 3-7 ft. tall

471. Rhus do.

472. Eriogonum do.

473. Opuntia do. , 2-4 ft. tall

474. grass hillsides at head of the Limpio, in small tufts

475. Pentstemon valley at head of the Limpio, 2-3 ft. tall

476. Asclepias prairie-dog town at lead of Limpio, 1-2 ft. tall

477. Solanum prairie at head of Limpio

478. Mamillaria do. , simple

479. Euphorbia do.

480. Sphaeralcea do.

481. Solidago in thickets at head of the Limpio

482. Compositae prairie-dog towns at head of Limpio June 26, 1852

483. Linosyris do.

484. Teucrium do.

485. Ranunculus In the Limpio

486. Senecio hillsides on the Limpio

487. Salvia pebbly bed of the Limpio, in large bunches, 1-2 ft. tall

488. Fendlera mountain-sides on the Limpio, 2-3 ft. tall, much branched

489. Aristolochia do. ,

490. Opuntia do. O. Kleiniae DC, Fl. Y, 330

491. Tragia do.

492 Juglans margin of the Limpio, 6-10 ft. tall, much branching

493. grass Valley of the Limpio Dasychlis tenuis

494. Aphora do.

495. ------ hillsides on the Limpio, 1-3 ft. tall

June 27th the party almost certainly left Jeff Davis County just north of its extreme east corner.

Concerning Ojo de Leon (i.e. Leon Springs), Comanche Spring (now Fort Stockton), see notes for Aug. 19-21, 1849. These are in Pecos County

496. Rhynchosia mountain-sides on the Limpio June 26, 1852

497. Euphorbiaceae do. ,2-3 ft. tall, branching

498. Dichondra do. , fl. yellowish white

499. Euphorbiaceae do. , fl. greenish white

500. Physalis do. , rather sweet-scented

501. Leguminosae do. 3-6 ft. tall, slightly branched

502. Eryngium Valley of the Limpio June 27, 1852

503. Cuscuta do.

504. Gonolobus mountain-sides on the Limpio, fl. yellow.

505. Boraginaceae Valley of the Limpio

506. Dalea do.

507. Compositae hills between the Limpio and Ojo de Leon

508. Zinnia do.

509. Physalis do.

510. Cuscuta valley of the Limpio

511. Oenothera hills between the Limpio and Ojo de Leon

512. Mammillaria do. ,fl. pink or light purple

513. Cereus do.

514. Cooperia do. , June 28, 1852

515. Cruciferae do. , among high grass

516. Gaura do.

517. grass plains betw. the Limpio and Ojo de Leon

518. Cevallia do.

519. Polygala hills at Leon Springs

520. grass hills near Leon Spr., prairies in small tufts

521. Euphorbiaceae prairies Leon Sp. to Comanche Spring June 29, 1852

522. Nyctaginac. Boerhaavia hirsuta stony hills at Comanche Springs

523. Abutilon do.

524. Vesicaria do.

525. Hoffmannseggia do. , fl. sweet scented

All Pecos County, Texas.
Comanche Spring is present Fort Stockton
the camps at Escondido Springs and on Escondido Creek are
about 20 miles and 29 miles east of Comanche Spring.
See notes for Aug. 16-19th, 1849.

526. Hedyotis stony hills at Comanche Springs June 29, 1852

527. Dalea do. , fl. purple

528. Nyctaginac. Selenocarpus diffusus. do,

529. Lythraceae margin of Comanche Spring

530. Samolus do.

531. Hydrocotyle in Comanche Spring

532. Abutilon hills near Comanche Spring

533. " do.

534. Cuscuta margin of Comanche Spring

535. Chara in Comanche Spring

536. Rutosma hills between Comanche Spr. and Escondido Spring

537. Linosyris prairies between Comanche Spr. and Escondido Spr. June 30, 1852

538. Echinocactus rocky ledges at Escondido Creek

539. Gentianaceae Escondido Creek

540. Boraginaceae hills at Escondido Creek

541. Scrophulariac. do.

542. Euphorbia do.

543. Physalis do.

544. Cucurbit. do.

545. Eriogonum do.

546. Micromeria do.

547. Euphorbia valley at Escondido Creek

548. Malva do.

549. Malvaceae plains from Escondido Creek to the Pecos

550. Heliotropium do.

551. Gilia Ingidula acerosa do.

552. Zinnia do.

553. Malvaceae do.

(probably on both) 1 of these is type of S. lepidota var sagittaefolia (distr. no 1331)

554. ------? do. , 1-2 ft. tall

555. Cassia do.

556. PHYSALIS do. , fl. yellow

The wagon-road crossed the Pecos in the vicinity of the present town of Iraan and went down the east side of the Pecos River to Live Oak Canyon near old Fort Lancaster. This east bank is in northwestern Crockett County, Texas and along, doubtless, were collected the plants listed under July 1st and 2nd.

Collections of July 1 & 2 along Pecos River Valley on road betw. Iraan & Sheffield, Pecos County

557. Leucophyllum hills from EscondidoCreek to the Pecos, fl.purple July 1,1852

558. grass Valley of the Pecos

559. Compositae do.

560. Bgrass do.

561. Boraginaceae Heliotr. convolvulaceum / hills of the Pecos , fl white

562. Dalea do. , fl. yellow

563. Cuscuta valley of the Pecos

564. Compositae margin of the Pecos in dense patches

565. Palafoxia stony hills on the Pecos, fl. white or very light purple

566. Solanum among rocks on the Pecos, ascending by bushes 1-2 ft. high

567. Perezia among rocks on the Pecos, fl. purple

568. Oenothera in valleys on the Pecos , in large patches

569. Cucurbit. Valley of the Pecos

570. Chenopodium leptophyllum. bottom of the Pecos

571. Hoffmannseggia stony hills of the Pecos, many stems from the root

572. do. do.

573. Cuscuta rocky branches along the Pecos July 2, 1852

574. " stony hills along the Pecos

575. Dalea do.

576. Ionidium do.

577 Compositae do.

578. Euphorbia do.

579. " do.

580. Samolus margin of a spring on the Pecos

581. Umbelliferae do. , 1-2 ft. tall

582. " do. , 6-8 ft. tall

583 Pentstemon on rocky ledges along the Pecos

584. Gilia pebbly bed of a torrent descending to the Pecos

585. Euphorbia alluvial banks of the Pecos

586. Dicnonara live-oak grove on the Pecos

587. Baccharis bottom of the Pecos, much branching from root.

588. Sida stony hills of Live-oak Creek. Crockett County!

end 1st List

"July" Big Bend of Devils River, Aristolochia Coryi

July 4, 1852 ~~Celtis Pallida~~

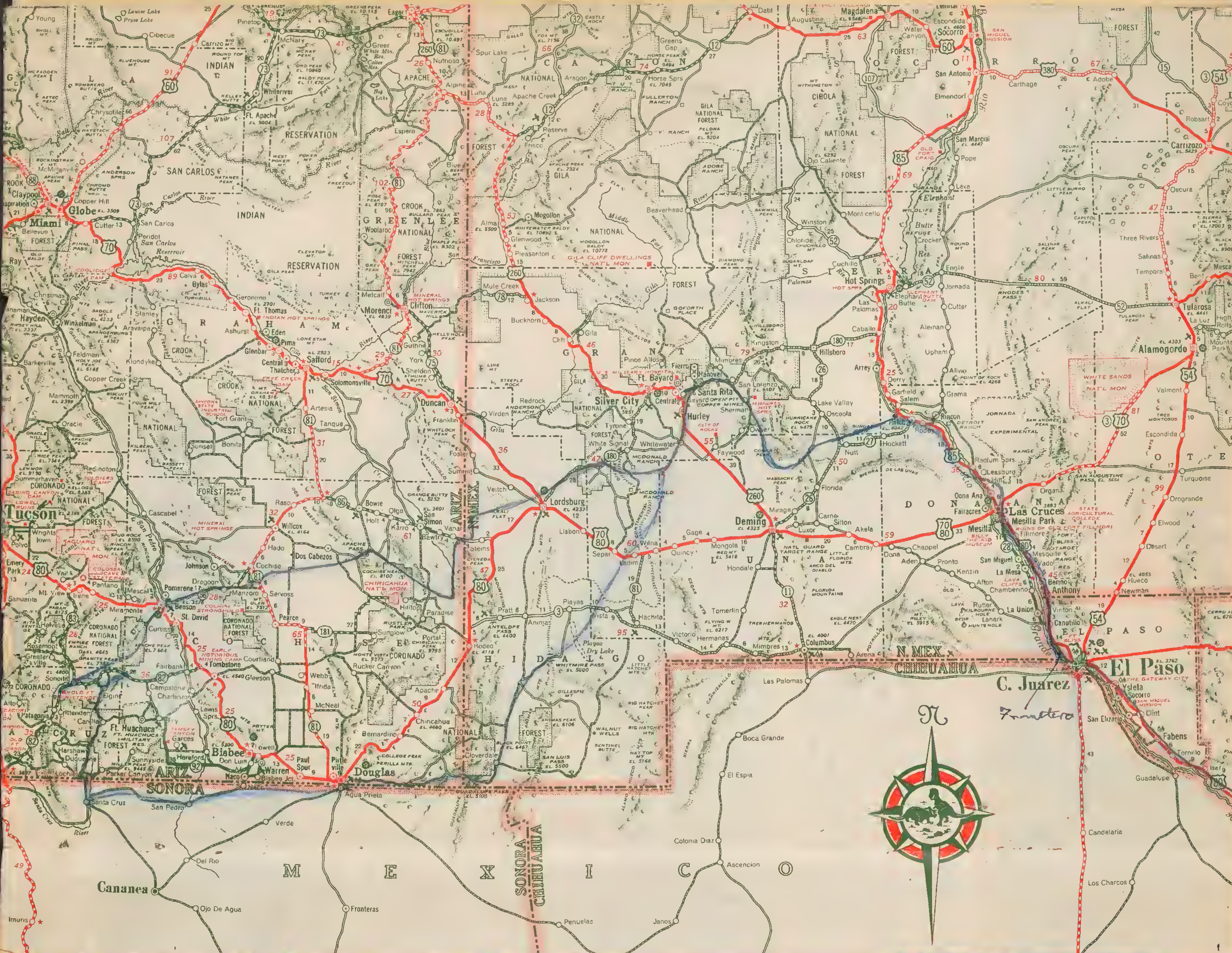
July 6, 52 San Pedro River Gomphrena.

| Polygonum hydropiperoides bed of San Pedro River.
July 8, 1852 Trichloris pluriflora (no 2025) from Bottom of Devils River at the Caves ford
July 8 52 Painted Caves, Chenop. leptophyllum
July 9, 1852, Celtis pallida (no. 1858) from Painted Creek (=? Piedra Pinta Cr of May 17, 1852)
Kinney Co, Tex.

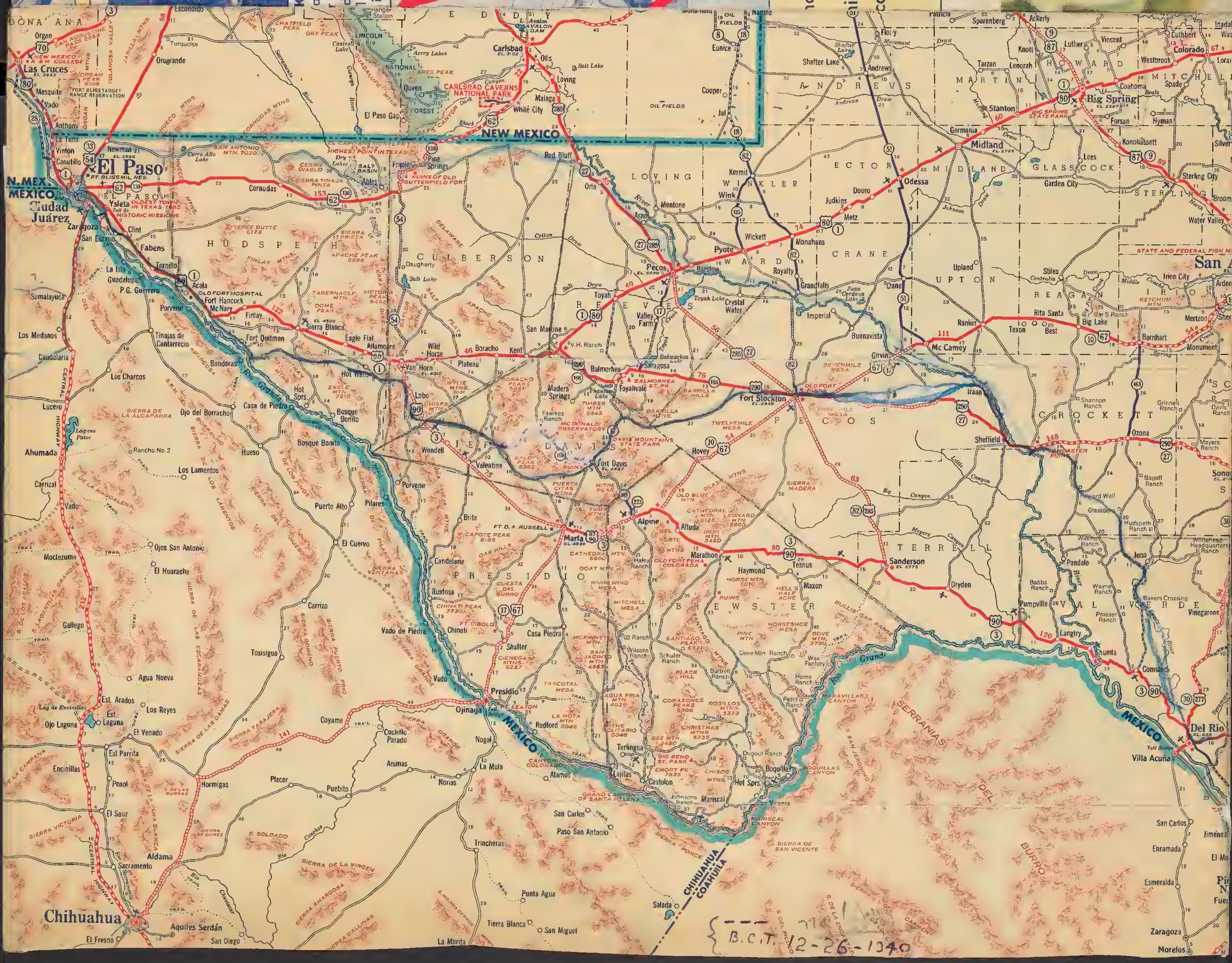
July 13, 52 bottom of the

San Diego

El Fresno



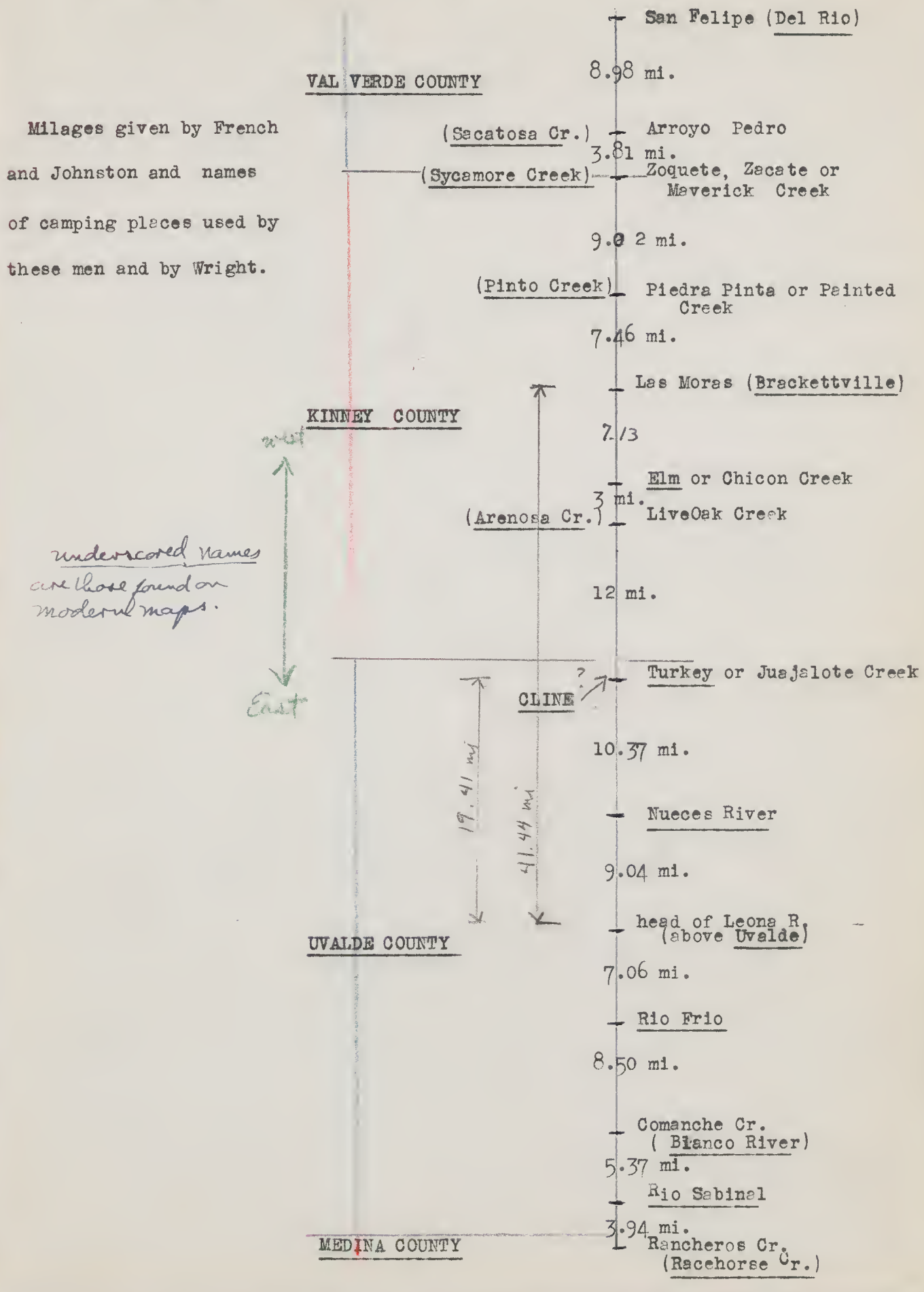
El Paso
C. Juarez
Las Cruces
Mesilla Park
Mesilla
Deming
Silver City
Lordsburg
Hot Springs
Socorro
Magdalena
Alamogordo
Tularosa
Carrizozo
Tucson
Globe
Miami
Bisbee
Douglas
Safford
Clifton
Morenci
Duncan
Tombstone
Benson
Willcox
Columbus
Cananea
Agua Prieta
WHITE SANDS NAT'L MON
GILA CLIFF DWELLINGS NAT'L MON
CHIRICAHUA NAT'L MON.
ARIZ.
N. MEX.
SONORA
CHIHUAHUA
M E X I C O


NEW MEXICO
N.MEX.
MEXICO
El Paso
Ciudad Juárez
Las Cruces
Carlsbad
CARLSBAD CAVERNS NATIONAL PARK
Pecos
Odessa
Midland
Big Spring
Fort Stockton
Alpine
Marfa
Fort Davis
Van Horn
Sierra Blanca
Presidio
Ojinaga
Sanderson
Del Rio
Villa Acuña
Chihuahua
Rio Grande
SERRANIAS DEL BURRO
CHIHUAHUA
COAHUILA
B.C.T. 12-26-1940

Milage by Emory in Rep. Mex. Bound. 1: 135

San Elizario	59.8 mi. to	El Paso
last camp on Rio Grande	31.2 m. to	Hudspeth
Eagle Springs	19.7 m. to	
Van Horn Wells	32.8 m. to	Culberson
Dead Mans Hole	1355 m. to	
Barrel Spring	18.4 to	Jeff Davis
Fort Davis	28 m. to	
Varela Springs	33.8 to	
Leon Springs	8.8 to	
Comanche Springs	19.4 m. to	
Ojos Escondidos	8.5 to	Pecos
Arroyo Escondido	16.6 to	
First camp on Pecos	38.2 m. to	
Ferry of Pecos	7.2 to	
Live Oak Creek	30.4 m. to	Crockett
Howard Springs	44 m. to	
First camp on San Pedro (Devils) river	19.5 m. to	
2nd crossing of San Pedro	18.3 m. to	
Palos Blancos	15.7 m. to	
Painted Caves	2.5 m. to	Val Verde
First crossing of of San Pedro	10.2 m. to	
San Felipe	8.8 m. to	
Arroyo Pedro	3.8 m. to	
Zoquete Creek	8.6 m. to	
Piedra Pinta	7 m. to	
Las Moras (Fort Clark)	7.1 m. to	Kinney Co.
Elm Creek	15.2 m. to	
Turkey Creek	10.7 m. to	
Nueces	9 m. to	
Head of Leona	6 m. to	Uvalde
Rio Frio	8.4 m. to	
Comanche Creek	5 m. to	
Sabinal	3.9 to	
Rancheros Creek	8.3 m. to	
Rio Seco (Dhanis)	15.2 m. to	Medina
Quihi	10m. to	
Castroville	18 m. to	
Leon	6.5 to	
San Antonio		Bexar

WESTERN HALF OF THE ROUTE between SAN ANTONIO and DEL RIO (San Felipe).



Milages given by French and Johnston and names of camping places used by these men and by Wright.

underscored names are those found on modern maps.