Robinia pseudo acacia. Purgatory creek, near the Raton pass. Baptisia lencantha. As far as Pawnee fork.

Cassia chamæcrista. First seen July 3, thence to the Arkansas

Petalostemum candidum. High prairies, as far as Bent's Fort. violaceum. With the preceding.

Psoralea floribunda. Pawnee fork. Dalea laxifolia. With the preceding.

Lathyrus linearis. August 9. Amorpha canescens. Fort Leavenworth to Pawnee fork. Schrankia uncinata. Stranger creek to Arkansas crossing. Darlingtonia brachy-loba. Pawnee fork and 110 Mile creek.

Glycyrrhiza lepidota. August 13. Cereis Canads. Kanzas river.

TOTAL CONTROL W ROSACEE. The stand of the st

Cerasus Virginiana. Kanzas river, Arkansas river, and Purgatory creek.

Fragaria Virginiana. Kaw river.

Rubus occidentalis. Missouri river and Kaw river.

villosus. With the preceding.

Prunus Amer. Pawnee fork, Arkansas river, and Canadian

Cralegus coccineus. Stranger creek. Rosa lucida. Kaw river, but and boow costs of atthing swist

ONAGRACEÆ.

Enothera. Several species occur from Kaw river to Bent's Fort. Gaura coccinea. August 13.

LOASEÆ! SAME WIE BRIGGET

Mentzelia nuda. Bent's Fort and valley of the Timpas.

GROSSULARIACEÆ.

Ribes accreum. Purgatory creek and Timpas, near its head. triflorum. Diamond spring.

CACTACEÆ.

Opuntia Missouriana. Pawnee fork, Purgatory creek, and Cañadian river. Mammillaria sulcata. Near Pawnee fork.

Acer neguado. Banks of

Clycyribina glabra

CORNACEÆ.

Cornus paniculata. Big John spring. stolonifera. Stranger creek. Florida. Kaw river.

CAPRIFOLIÆ.

Symphonearpus glomeratis. Purgatory creek. occidentalis. With the preceding. Symphora racemosa. Big John spring.

UMBELLIFERÆ. BEREGERAL AUGUSTA

Sium latifolium. Diamond spring. Angelica. Head water, Purgatory creek. Eryngium aquaticum. Near Wakaroosa creek.

RUBIACEÆ.

Galium tinctorum. Ponds near Lost spring. Cephalanthus occidentalis. Stranger creek.

COMPOSITE.

Senecio (near) palustris. Raton. filifolius. Bent's fort to Santa Fé. Rudbeckia. Fort Leavenworth to Arkansas crossing.

hirta. Lost spring to Jackson's grove Erigeron strigonium. Pawnee fork.

Eupatorium purpureum. Turkey creek, Arkansas crossing, and Bent's fort.

Eurotia lanata. Rio Cañadian to Santa Fé and south. Frémontia vermiculs. Valley of the Timpas. Grindelia squarrosa. Arkansas river, near the crossing.

Solidago altissima. Bent's fort. Solidago. Cotton-wood fork.

Liatris spicata. Crossing of the Arkansas river.

squarrosa. Plum buttes. Silphium lacenatum. From Fort Leavenworth to Cottonwood. Coreopsis tinctorea. Turkey creek to Bent's fort.

Asters. With the preceding. Gaillardia amblyodon. Plum buttes, and on the Moro. With the preceding. (Leaves lanceo-

Helianthus. Abundant from Coro creek to Santa Fé. dentatus. At San Miguel.

ERICACEÆ.

Arctostaphylos uranasi. Council grove.

LOBELIACEÆ. A temput satisavitt

lobatum. Near Bent's fort. Lobelia leptostacliza. Cottonwood fork. cardinalis. Bent's fort.

Ex. Doc. No. 41.

CAMPANULACEÆ.

Campanula rotundifolia. Raton pass.

OLEACEÆ.

Fraxinus Americanus. Ash creek.

APOCYNACEÆ. maid amilifial muit

Apocinum androsacmifolium. Lost spring.

ASCLEPIADACEÆ.

Asclepias verticillata. Stranger creek and Pawnee fork. tuberosa. Fort Leavenworth to Cottonwood fork.

CONVOLVULACEÆ.

Ipomea leptophylla. Walnut creek to the Canadian river. Cuscuta Americana. In the bottoms near the "caches." Convolvulus. (Near sepium.) August 14. Euploca convolvulaceæ. Raton pass.

BORAGINACEÆ.

Republican marsurella

Grindella squarross.

Barrolla laustu. Rio Canadian, to Sager Po and agus Myosotis glomerata. Arkansas river, near caches.

POLEMONIACEÆ.

Gilia (cautua) longiflora. Raton pass.

Silphium laurnatum. Fro. ATAIBAL nearth to Cottonwood, Coreopsignatuctores, Challey orecit to Beat's fort. Hedeoma leptophylla. Near crossing of Arkansas Warana Monarda fistulosa. Near caches. allophylla. 110 creek; Cottonwood fork. Mentha peperita. Bent's fort.
Salvia azurea. Arkansas bottoms and New Mexico. Teucrium Virginicum. Pawnee fork. ort insbaud A . andiasis H

dentatus. At Di SOLANACEÆ.

cardinalia. Bonde foll, une de atelien de

the Orministry and Appeal Solanum nigrum. Bent's fort. triflorum. Arkansas river, near crossing. Industrolar Nycterum lobatum. From the caches to Bent's fort. Physalis. August 4. lobatum. Near Bent's fort. Lobelia leptostacliza. Dottonwood fork. Lodictivia acoro

SCROPHULARIACEÆ.

Pedicularis canads. Near Pawnee fork.

CHENOPODIACEÆ.

Chenopodium album. From Fort Leavenworth to crossing. Fremontia vermicularis. Purgatory creek and Timpas. Artemisia. Purgatory creek.

Obione canescens. Valley of the Timpas. Salicornia herbacea. Arkansas river crossing.

VERBENACEÆ.

Verbena pinnatifida. Rio Canadian and Rio Rayado. angustifolia. Little Arkansas river. Lippia cuneifolia. From Pawnee fork to Santa Fé.

CUCURBITACEÆ.

Cucumis perennis. From Walnut creek to Santa Fé.

adaed of Joseph Protegro NICTAGINEE. I asimical Vanishing

Oxybaphus, (new to me.) Torr. Slender branching spears. "Ric los Animas." nictaginea. Raton and "Rio Canadian."

POLYGONACEÆ.

Erigonum. Walnut creek. tomentosum. Council grove. Polygonum, (long lacerated sheath, no flowers.) Walnut creek amphibium. Turkey creek.

LAURACEÆ.

Laurus benzoin. Kaw river and Council grove.

EUPHORBIACEÆ.

Euphorbia marginata. Pawnee fork to Bent's fort. hypericifolia. Turkey creek. ? By the road side, near the "caches," and in the buffalo wallows. Croton capitatum. Crossing of the Arkansas river.

Administration Administration and Lane.

Agropyrum. Stranger creeks

Atheropogon olygosiasbinan, Canadian river,

Louista ritide. Paunees frit ! !! !!!

URTICACEÆ.

Humulus lupulus. Raton pass and Canadian river. Morus rubra. Council grove and Kaw river. Urtica canadensis. Kaw river and Stranger creek.

Chenopolium album CEA. TE and a methodonad Ulmus Americana. Pawnee fork. Celtis crassifolia. Woods at Council grove.

Transferred sinvesting AMENTACEÆ.

Salix longifolia. Council grove, 110 Mile creek. (no flowers or fruit.) Arkansas river. Populus monolifera. Timpas, at head of Purgatory creek. canadensis. From Kaw river to Santa Fe. Santa Fe. (new to me.) Torr. Rio Canadian. Salix augustifolia. Arkansas river.

CONIFERÆ.

Juniperus Virginica. Timpas, and from Purgatory creek to Santa (different from Virginica.) Torrey. Near Santa Fé. Pinus monophyllus. Raton pass to Santa Fé.

POLYCONACER.

tomentosem. Council grove.
Relygonum, (long lucerated checkly, no flowers.) Walnut cro-

LABRACEE

EUPHORBEACEM; TELESCOPE

? By the toad side, near the "raches," and in

amphibiam. Turkey crest.

Laurus bengoin. Kaw river and Council grove, design

Esphorbia marginata. Propositore to Bent's fort. hypericitohy. Purkey creek.

avellew oldhod was Croton capitalism. Crossing of the Arkanses river.

Engonin Walnut oresis and

MONOCOTYLEDONOUS OR ENDOGENOUS PLANTS

ALISMACEÆ.

Equipoten hyanales, Man Questing of the Arksones.

Sagittaria sagittifolia. Head of Timpas.

MELANTHACEÆ.

Melanthuim Virginicum. Stranger creek and Wakaroosa river. LILACEÆ.

Yucca angustifolia. From Bent's fort to "Fra Cristobal." Lilium tigrinum. Wakaroosa river. Enstoma Ruseliana. Bottom of Arkansas and Cañadian. Alluim vienale? Raton pass.

JUNEACEÆ.

Juncus tenuis. Raton pass.

COMMELINACEÆ.

Tradescantia Virginica. Fort Leavenworth to "110 Mile creek rosea. With the preceding. Commelina angustifolia. Pawnee rock and Raton pass. (long accuminated spatha.) Raton.

SMILACEÆ.

Smilax rotundifolia. Kaw river, Council grove, and 110 M creek.

CYPERACEÆ.

Scispus triqueter. Low grounds near Arkansas crossing. atrovirens. Pawnee fork. Cyperus filiculmis. Little Arkansas. Carex festuca, Wakaroosa river.

GRAMINEÆ.

Arundo phragmites. Arkansas, Timpas, and Cañadian rivers. Sesleria dactyloides. · Pawnee fort to Bent's fort.

Agropyrum. Stranger creek. Atheropogon olygostachium. Canadian river. Koeleria nitida. Pawnee fork.

EQUISETACEÆ.

ALISMAL MAUL

of Arme, The State grown or exponently bee steady common the contract of the advantage of the

Pucos abgustitolia. From Book adam to a reactional

Einstein Rasshaus, : Rettoment gekansts and Caladian.

Tradescapta Virginica, Part Leavenwork to " 110 Mile

Smiles rotundifolia. How river Council groves and 110.

Someons triqueter. Low grounds near Arkansas grossing.

CRAMINEAL

Arundo phragmites. Arkansas, Timpas, and Canadian cives

Commelina augustifolia Pawate rock and Katon pass.

(Tong anount pared spelles) Raton.

water with the prescriber.

artovirons. Bawace fork.

Cyperge Bliedlighs: Little Arkansas.

Sesleria ductyloides . Physice fort to Bent's fort,

Carex festuca, Weigaroesa siver.

Report passes asses appeared to the

COMMERSION OF STREET

Sugittatis arginable. Read of Tappan

Library tigracem. Watercoss tivers

* 1 Seed notable tolensiv nights.

Equisetum hyemale. Near crossing of the Arkansas.

marked a route considerably to the north of Guadaloupe pass, APPENDIX No. 7. the parest where I turned of from that heaverful little river. The

most sensible and experienced of the emen, Lacony, who lives in Tues,

On the man which I made and which is in your beyone, is

Washington, December 6, 1847.

SIR: I have the honor, at your request, to address you a brief memoir on the subject of the district of country in Sonora, Mexico, which I passed over in November and December last, with a wagon train, when I deviated, in search of a practicable route, from the mule trail of Brigadier General S. W. Kearny, on his march from New Mexico to California.

When he turned off from the Rio Grande, opposite the copper mines and the heads of the Gila river, I kept the river for thirty miles to the south, and making a southern bend, turned again towards the north, and struck his route (as surveyed by Mr. Emory of your corps) just above the village of the Pimo and Maracopa Indians, an estimated distance of 444 miles.

Immediately below the point of deviation, on the Rio Grande, the country bordering the river became sensibly flatter and less broken. I left the river when in view of a point marked on the common maps as "San Diego," and the distant view towards "El Paso" proved the country to be unbroken and comparatively level.

From the high valley of the river I ascended to the table land. of Mexico, by an almost insensible slope over smooth prairie. For 150 miles on this smooth level table land, which is studded with isolated hills or mountains, I journeyed without any difficulty, passing over but three hills, in two cases, I know, in the third, I believe, unnecessarily. I then, unexpectedly and suddenly, arrived at a great break off to a lower level of country, the descent to which was very broken and rough mountains for fifteen miles. I found, however, that I had at that moment fallen into an old wagon trail, which led, I was told, from Yanos. I was able to get my wagons through, following a stream all the way, and descending in the 15 miles possibly a thousand feet. This was the head of the Huaqui river, which empties into the California gulf. I was told that this was called the Pass of Guadaloupe.

I then passed an unbroken country, about 80 miles, when I fell upon the José Pedro river, which empties into the Gila. I descended this without difficulty of ground about 80 miles. In turning off there is an ascent to nearly level country of, perhaps, above an hundred feet, but it could be made very gradual. It is then about 48 miles to Tueson, a town of about 500 inhabitants with a fort and garrison. This distance is over much smooth ground, maintaining the same general level. Tueson is in a rich and well cultivated valley, where there is also a dense forest of maguey. From Tueson it is some 75 miles to the Gila. It is a level plain, generally of clay, where my wagons and footmen (water being very scarce) passed at the rate of about 30 miles a day,