Copy.

Wilmington,

September 22, 1893.

Dear Dr. Sandberg,

I return Holzinger's list, the only specimens I have here to compare are the following. The others I presume were returned to you so that I cannot tell whether he or I is right in the cases when we disagree. But of these now mentioned I am well satisfied. He calls "Spiraea betulifolia, Pall but in inflor, approaching S. Salisfolia," That is just the reason Greene made it his S. pyramidalis.

539 "Potentilla Norvegica" - my specimen is as I named it, P. rivalis, Nutt. var. millegana, Engel.

745 "Allium attenufolium, Kellogg" - my specimen is good A. cernuum - nodding flowers - my bulb from a rhizoma and all the rest.

355 "A. Stellatum, Nutt!" - The specimens here correspond exactly with specimens of A. serratum, Watson named by him.

I re-inclose his list.

I have had much pleasure in going over the present sending in which I already find some things of much interest although these determinations are only tentative. Here is the list so far.
220 *Rununculus aquatilis*, L. *var*;
209 *R. multifidus*, Ph. *var*; *terrestris*, *long*;
776 *R. Eschscholtzi*æ, Schlecht.
776 I can only make a form of the above in the absence of fruit.
152 *R. hispidus*, Mx. *proparte*
359 Delphinium *distichum*, Geyer. You have collected this before and I gave you the name of *D. simplex*, Dougl. This seems to be still a doubtful species and I take it the above name of Geyers is the more sure one.
563 *D. scopulorum* Gray - a doubtful form.
432 Corydalis *aurea*, Willd, *var. occidentalis*, Engelm.
142 Cheiranthus *Menziesii*, B & H.
92 *Arabis*, Cusickii, Wats.
275 *Arabis* -? probably of the genus but I am unable to place it and it may be new.
50 *A. spathulata*, Nutt?
202 *A. lyrata*, L? or near it.
426 Vesicaria *Douglasii*, Nutt.
17 *Physaria* Geyeri, Nutt?
271 *Sisymbrium linifolium*, Nutt.
190 Thelypodium - I have nothing to match it and it is wholly doubtful to me - it is near *T. laciniatum* but seems quite distinct.
D. T. laciniatum, Endl. with purple calyces.

294 Arenaria congesta, Nutt. var. subcongesta, Wats.

296 A. Franklinii, Dougl.

346 Tissa marina, Britton.

227 Talinum spinescens, Torr. with larger leaves and flowers than usual.

89 Montia fontana, L.

546 Calandrinia Tweedyi, Gray!

204 Claytonia parviflora, Dougl.

15 C. gypsophylloides, Fisch & Meyer.

607 Hypericum anagalloides, Cham. & Schlecht.

430 Sphaeralcea longisepala, Torr. agrees in the main with my specimens of this rare plant but the sepals are shorter and the divisions of the leaves less acute than usual.

501 Acer macrophyllum, Pursh.

Other names will go to you as soon as I can look them up.

Sincerely yours,

Wilmington,

September 27, 1893.

Dear Dr. Sandberg:

I enclose another list which must be taken in some cases as preliminary. Some of the specimens, notably the Lupins are very difficult. This you will see by my notes. I shall probably have to revise somewhat hereafter.

Yours very truly,


465 Lupinus - may be a form of L. ornatus, Dougl. but am quite doubtful about it.

35 L. ornatus, Dougl.

306 L. confertus, Kellogg "flowers sessile," "fractis persistent."

B. L. flowers apparently yellow - I have never seen a form like this so densely white silky tomentose - racemes dense but short leaflets 5 - 8 shorter petioled and many the plant much branched, otherwise it has the marks of L. leucophyllus and must be near it. I have seen no description to match it.

179 L. leucophyllus, Dougl.

155 L. sericeus, Pursh?

77 L. Burkei, Watson I suppose judging from the persistent
villous tracts.

214 L. Wyethii, Watson I understand this pretty well now.

215 E. cannot place this at all now.

402 L. " " " " "

305 L. agrees with L. leucophyllus, Dougl. better than with any other.

527 Trifolium longipes, Nutt.

421 T. microcephalum, Ph.

149 Astragalus Spaldingii, Gray.

312 A. sclerocarpus, Gray.

354 A. conjunctus, Wats.

196 A. Gibbsii, Kellogg.

163 A. stenophyllus, T. & G.

473 A. campestris, Gray.

132 A. lentiginosus, Dougl.

308 Vicia Americana, Muhl.

24 Lathyrus palustris, L? a peculiar form

655 Eriogynia pectinata, Nutt. (Spiraea, T & G.) (with this was a small specimen of Rubus pedatus, Smith)

712 Spiraea betulaefolia, Pall.

No label or number Rubus lasiococcus, Gray.

315 Potentilla gracilis, Dougl.
717  *Potentilla gelida*, C. A. Meyer?
320  *Rosa Fendleri*, Crepin.
544  *Crataegus rivularis*, Nuttall.
711  *Lepropetalon spathulatum*, Ell.
657  *Saxifraga stellaria*, L.
567  *Mitella Breweri*, Gray.
699  *Ribes laxiflorum*, Pursh.
566  *R. Hudsonianum*, Richards.
728  *R. bracteosum*, Dougl.
442  *R. cereum*, Dougl.
645  *R. lacustre*, Poir.
150  *R. setosum*, Lindl.
93   *R. cereum*, Dougl.
C.  *R. oxyacanthoides*, L.
555  *Sedum stenopetalum*, Pursh.
335  *Callitriche verna*, L.
159  *Gayophytum racemosum*, T. & G.
428  "   "
159  (1r's) *G. ramosissimum*, T.& G. known from 159 by the short pods
     which are longer pedicelled.
279  *OEnothera albicaulis*, Nutt.
162  OE. *Nuttallii*, T.& G.
130 Oenothera heterantha, Nuttall?

441 OE. Boothii, Dougl. unusual form.

290 OE. Andina, Nutt.

162 (lr's) " " young state of it.

262 OE. strigulosa, T. & G.

160 Mentzelia albicaulis, Dougl.

367 Symphoricarpos rotundifolius, Gray.

479 Kelloggia galiioides; Torr.

224 Galium multiflorum, Kellogg.

551 Valeriana sylvatica, Richardson.
Dear Dr. Sandberg:

Having now gone over the balance in one of the two bundles into which your package was divided I now send the result with the same reservation as before. I may be somewhat slower with the next bundle. I would be glad to have you criticize my determinations freely.

Yours sincerely,


408 & 491 Brickellia oblongifolia, Nuttall.

169 Townsendia florifer, Gray.

653 Erigeron salsuginosus, Gray.

724 " " smaller.

476 E. macranthus, Nutt.

233 E. Chrysopsidis, Gray.

445 E. poliospermus, Gray.

142 E. peucephyllus, Gray.

236 E. concinnus, T. & G.

255 E. filifolius, Nuttall a form.

195 E. radicatus, Hook - as to the broad leaved specimen - the others may be different but I cannot place them now if they are.
254 & 458 E. corymbosus, Nutt.

A. Antennaria Carpathica, R.Br.

213 A. dioica, Gaertn.

51 A. stenophylla, Gray.

166 Balsamorhiza deltoidea, Nuttall.

299 Layia glandulosa, Hook & Arn.

375 Hymenopappus filifolius, Hook.

183 Eriophyllum caespitosum, Doug. var: leucophyllum, Gray.

725 Arnica alpina, Olin.

247 Tetradymia canescens, DC.

626 Cnicus edulis, Gray.

313 Crepis occidentalis, Nutt. - by the curious hairs on the involurom this approaches the var: crinitus, Gray.

232 C. acuminata, Nutt.

208 C. runcinata, T.&G.

526 Hieracium cynoglossoides, Arvett.

433 Stephanomeria paniculata, Nutt.

371 Lygodesmia junca, Don.

287 Downingia pulchella, Torrey.

741 Vaccinium Myrtillus, L. var: microphyllum, Hook.

68 V. caespitosum, Michx.

744 V. myrtilloides, Hook.

746 V. ovalifolium, Smith.
706 Gaultheria ovatifolia, Gray.

714 Cassiope Mertensiana, Don.

668 Bryanthus empetrisformis, Gray.

552 Pyrola picta, Smith.

631 Dodecatheon Jeffreyi, Moore, var: laucifolium, Gray as near as I can make it out.

545 Douglasia nivalis, Lindl. var: dentata, Gray.
Dear Dr. Sandberg:

I send the final list of your plants. They have been studied amid the interruptions and occupations of a busy life and as you see lack the leisurely application which goes for so much in these things.

I shall be glad to hear from you about the names whenever you wish to write.

They have been a very interesting lot and I am thankful to you for the opportunity. I will now take out all the doubtful ones and all those you wish returned and go over these again after while. Just now I have a big job on hand which will require three or more weeks to finish.

You will hear again from me after while.

Very sincerely yours,

[Signed] Wm. M. Canby
260 Krynitania pterocarya, Gray.
304 K. oxycarya, Gray.
249 K. Fendleri, Gray.
121 K. too young for determination.
173 K. " " " "
168 Lithospermum pilosum, Nutt.
317 Nicotiana attenuata, Torrey.
659 Spraguea umbellata, Torr.
667 Pentstemon Menziesii, Hook. var: Douglasii, Gray
459 P. Menziesii, Hook. var: Scouleri, Gray.
185 P. glaber, Pursh.
376 P. acuminatus, Dougl.
549 P. confertus, Dougl. var: caeruleo-purpureus, Gray.
355 P. Richardsonii, Dougl.
115 Mimulus Suksdorffii, Gray.
357 M. pilosus, Nutt.
193 Limosella aquatica, L.
710 Veronica alpina, L.
80 Castilleia pallida, Kth - between type and var: occidentalis, Gray.
234 Orthocarpus tenuifolius, Bth?
143 Orthocarpus tenuifolius, Bth? but there is a lack of color in the bracts and all there divisions are acuminate pointed instead of blunt.
436 Aphyllon Ludovicianum, Gray.
13

456 A. Californicum, Gray?

244. Audibertia incana, Bth.

362 " " "

413 Monardella odoratissima, Bth. connecting with E. villosa, Bth.

353 Lophanthus anisatus, Bth - in the heads approaching L. urticifolius, Bth.

503 Stachys ciliata, Dougl.

241 Monolepis pusilla, Torr.

316 Chenopodium leptophyllum, Nutt.

377 " " "

257 C. (Blitum) capitatum, Wats? too young.

372 Atriplex truncata, Gray?

349 A. Nuttallii, Watson.

226 Grayia polygaloides, Hook & Arn.

410 Sarcobatus vermiculatus, Torr.

167 Eriogonum thymoides, Benth.

521 E. umbellatum, Torr.

319 E. sphaerocephalum, Dougl.

235 E. ovalifolium, Nutt. var: proliferum, Wats.

348 E. dichotomum, Dougl. - probably - on account of the loose habit and acute leaves - but the flowers are those of ovalifolium.

493 E. dichotomum, Dougl.

383 E. microthecum, Nutt.

424 E. elatum, Dougl.
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<td>Oxytheca dendroides, Nutt.</td>
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<td>Chorizanthe Watsoni, T. &amp; G.</td>
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<td>Comandra pallida, A.D.C.</td>
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<td>Alnus rubra, Bong. see Bul. Cal. 2 p.80</td>
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<td>Habenaria gracilis, Wats.</td>
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<td>Allium Geyeri, Wats.</td>
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<td>A. acuminatum, Fraser.</td>
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<td>205</td>
<td>A. stellatum, Fraser.</td>
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<td>533</td>
<td>Lilium Columbianum, Hanson.</td>
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<td>675</td>
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<td>679</td>
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<td>388</td>
<td>J. tenuis, Willd in part</td>
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<td>358</td>
<td>J. Bolanderi, Engelm.</td>
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<td>524</td>
<td>Potamogeton natans, L.</td>
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<td>266</td>
<td>Scirpus Nevadensis, Wats.</td>
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<td>332</td>
<td>S. pungens, Vahl. small form</td>
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|55 | S. " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 


323 Eleocharis palustris, R.Br.

416 E. with 3 stigmas - no fruit and therefore wholly uncertain - scapes nodulose but the plant is very different from E. nodulosa, Schult.

81 Carex filifolia, Nutt.

767 C. nigricans, C.A.Meyer.

756 C. Bonplandii, Kunth.

188 C. Douglasii, Boott.

79 C. " "

321 C. siccata, Dewey.

508 C. Deweyana, Schweinitz.

773 C. stipata, Muhl. var?

148 C. muricata, L. var: gracilis, Boott.

636 C. near Sitchensis, Prescott but the perigynium is beak-toothed and the tracts are too short.

194 C. cannot place at all now.

674 C. Mertensii, Prescott.

707 C. foetida, All.

30 C. Novae-Angliae, Schw. var: Rossii, Baily.

322 C. filiformis, L. var: latifolia, Boeckler.

515 C. vesicaria, L.
Dear Mr. Sandberg:

Your note of 5th inst. is at hand. I think in this case I had better look into one or two of these cases at once if not into all. 166 Balsamorhiza deltoidea, Nutt. B. careyana is very much like this and differs mainly in the canesantly tomentose achenes and the persistent rays. I cannot well determine the latter point in the specimen here, although they do not look like those of B. Careyana; but the achenes are smooth and not at all like those of B. Careyana.

725. The single specimen sent is almost too young. It has but two pair of stem leaves and look likes a smooth form of N. alpina. But if not where do you put it? It is possible that it may be the A. latifolia of Gray; A. Chamissonis, Les verr - look it up and give me your views further. All these specimens are very variable.

552. Pyrola picta, Sm. This is also a very variable species of all that Dr. Gray includes in it (P. dentala ) and to be considered as one species. Your plant is exactly like one from the Teton Range, Wyoming, which Professor Porter named P. chlo- rantha? adding -"calyx and tubes longer and more acute, leaves
less round and scape less angled" - the very points of P. picta. It may be best to separate these sometime but the mere marking of the leaves would not be sufficient without other characters.

Rubus lasiococcus I named as it agrees with my specimens of this plant. It is a trailing vine - the specimen two feet or more long with small white flowers and leaves of this shape - the serrature somewhat sharper than as represented.

I may as well add determinations as far as ascertained:

105 Polemonium pectinatum, Greene.
600 Phlox douglasii, Hk.; var. diffusa, Gray.
443 P. speciosa, Ph.
274 P. caespitosa, Nutt.
78 Gilia gracilis, Hook.
350 G. aristella, Gray.
270 G. capillaris, Kellogg.
201 G. linifolia, Bth., var. pharnaceoides, Gray?
283 G. pusilla, Beth., var. Californica, Gray? or n.sp.
181 G. pungens, Bth.
261 G. inconspicua, Dougl.
246 G. floccosa, Gray.
301 G. inconspicua, Dougl.
259 Conanthus aretioides, Watson.
352 Phacelia humilis, Gray.
288 P. ramosissima, Dougl.
306 P. Ivesiana, Torr.
343 Coldenia Nuttallii, Hk.
223 Pectocarya penicillata, A. DC.
277 Echinospermum diffusum, Lehm.
174 E. deflexum, Lehm., var. Americanum, Gray.
373 Krynitskia leucophaea, Gray.
440 K. glomerata, Gray.

I am always glad to have your strictures in the names.

Yours sincerely,

(Signed) Wm. M. Canby.
My dear Dr. Sandberg:—

I have been looking over your willows this morning and will proceed to give you my first impressions as to names &c— an informal "talky talky" report. By and by when I come to mount the specimens I shall want to give a few of them a more careful examination with the aid of those capital helpers a cup of hot water and low power microscope.

11a Carleton Minn. male and female S. discolor Muhl.

16a Thompson Minn. S. humilis Marsh.

17a Carleton, Minn. S. rostrata Rich. f. monstrosa.

37a Hennepin Co. S. lucida Muhl. Two forms which can not be precisely determined as to variety &c without the mature leaves.

48 & 24 S. petiolaris Sm. v. gracilis Anders.

12a I should without much hesitancy refer the male to S. petiolaris v. gracilis but the pistillate have a doubtful look, as if they showed a cross with S. cordata. Without the leaves it is impossible to feel perfectly sure, so I would advise you, for the present at least, to withhold these from distribution.


S. flavescens Nutt. v. scouleriana Banatt.

111 E. Washington Park Lake. Alt. 2,3000

S. lasiandra var. landifolia Anders (sp) but can...


29. " S. cordata Muhl. forma

197 Sprague. This I take to be S. lasiandra var. fendleriana Anders. (sp) but can not feel quite sure without the mature leaves. As I have cited under this form as a synonym S. pentandra L. var. caudata Nutt. some botanist of the Agricultural Department, whose name I can not now recall as I write, has criticised my selection of Anderson's name, claiming that I should have written S. lasiandra var. caudata. In this I am inclined to think he is right, but I have no copy of Nuttall's Flora, do not in own the work and am unable to go back and revise this particular the work done on the Willows of California more than ten years ago. I think however that I should advise you to write caudata Nutt. instead of fendleriana Anders. It is a puzzle, anyway, to decide what is best to do with the protean forms of this species. I should like right well to arrange them all under S. lucida, only that having done this much still better reasons would exist for carrying the whole group to the European S. pentandra, and by the time this was done the aggregation would be dropped as unwieldy and inconvenient.

72. Spokane. S. sitchensis Sanson.

720. Stevens Pass. A mountain form of the same species S. sitchesis showing retarded inflorescence.

This species is found in the high mountains west of the Great Basin southward as far as the Sierra Nevada of California. *S. californica* is probably only an extreme modification of the same species.

480. Peshastin. *S. longifolia* Muhl. A form with very long, slender aments. The same has been collected by Mr. Piper in western Washington and by Dr. Lyall in the mountains north of your locality.

In examining the willows which you send me from the Plain of the Columbia or the mountains on the north, I am struck with a much greater resemblance to the Flora of the Columbia river valley farther down its course (say in Suksdorf's old collecting ground Klickitat Co.) than I had expected to find. The forms of *S. lasiandra*, *S. sitchensis*, *cordata*, *longifolia*, *scoulerianna* &c. are such as I should not have been surprised to receive from the Columbia anywhere clear down to its mouth. Furthermore there is not found in the entire collection a single species characteristic of the Rocky Mountain Flora east of the Great Basin I shall be glad to learn from you if in the Flora as a whole this relationship is sustained.

Let me thank you for the ample specimens. I do so enjoy having enough of a thing to fill a sheet while I am about it, especially if the specimens are judiciously selected as are all that come from your hand.

Yours very sincerely,

M.S. Bebb
Wilmington, Nov. 10th, 1893.

Dear Dr. Sandberg,

I have now gone over your second sending and below I give you a full list. Of a few I will make remarks here. The plants are unusually interesting.

(no No.) Angelica Canby C.R. I believe I have examined this as well as I could and think that it agrees very well with the above in the original specimens. I hope Dr. Rose will confirm it.

810 Erigeron—This is a complete puzzle and if not published somewhere where I cannot find it, I believe it to be new. It has the habit of E. origanum but with the aster-like heads of E. salvaticus. I wish you would quote this to Dr. Rose also.

537 Madia glomerata, Brit. var:- but it is the Amida gracilis, Nutt— and I think it is a very marked variety of M. glomerata if not entirely distinct. Mark the strict stems, the almost connate, opposite, spatulate leaves and it is uniformly 2 flowered. It was collected in 1880 in your region by Brandegee and Tweedy.

553 Senecio—This is intermediate between S.petracus and S. werneriaefolius and connects with S. aureus var. Balsamitae. I suppose it had better be called a variety of the first named but it is gigantic for that.

550 Pentstemon Menziesii Hook var: perhaps a form of variety var: Douglasii. The flowers are very large and so are the leaves which
are rather thin and wholly entire.

575 Calochortus maweanus Leicht. var: This corresponds exactly with my specimen of the above named by S. Watson except that the inner face of the petals is scarcely hairy. It may have been published under a new name for it is far north of the usual range of the species but I cannot find it. It might be called var: nudum.

589 Is the same as Coll. Pringle, Mt. Shasta Aug. 23rd, 1881 called Carex scoparia Schk. var. fulva, Boot. Neither specimen is very fulvous however and they seem to me to be distinct from C. scoparia.

Is there any way I could try a specimen of the Calochortus? And if you ever have a chance again get me Veronica Gusickii, Balsamorhiza terebinthacea and Lupinus polyphyllus.

I will soon send your specimens back. I am going to Phila. today to look into those not yet re-examined.

Yours sincerely,

(Signed) Wm. M. Canby.
735 Delphinum pauciflorum, Nutt., var. depauperatum, Gray.
817 Silene douglasii, Hook.
601 Sagina linnaei, Presl. Large specimens.
547 Calandrinia leana, Porter. Large specimens.
742 Pachystima myrsinites, Raf.
523 Lupinus polyphyllus, Lindley.
D Spiraea betulaefolia, Pallas.
590 Prunus omarginatus, Walp.
704 Rubus leucodermis, Dougl.
750 Pyrus sambucifolia, C. & S.
315 Mitella trifida, Graham.
567 Mitella breweri, Gray.
M. Heuchera glabra, Willd.
809 Sedum divergens, Wats.
Hippurus montana, Ledeb.
145 Oenothera andina, Nutt.
528 Probably Gayophytum ramosissimum, T. & G. (But too young.)
519 Mentzelia dispersa, Wats.
Angelica canbyi, Coul. & Rose.
782 Aplopappus brandegei, Gray. (From the original locality.)
703 Aster modestus, Lindl.
759 Aster cusickii, Gray. forma.
807 Aster ascendens, Lindl. coll. Suksdorf.
Veronica cusickii, Gray.

Eriogonum umbellatum, Torr.

Eriogonum compositum, Dougl. With lanceolate rather than cordate leaves.

Polygonum minimum, Wats. Very fine specimens.

Alnus incana, Willd. var. virescens, Wats.

Chamaecyparis nutkaensis, Spach.

Listera cordata, R. Br.

Calochortus maweanus, Leicht. var. (nudum.)

Liliium columbianum, Hanson.

Juncus patens, Meyer.

Juncus longistylus, Torrey.

Carex echinata, Murr.

"Carex scoparia, Schk. var. fulva, Benth."

Carex retrorsa, Schw.

Carex utriculata, Boott.

Aspidium munitum, Kaulf. var. imbricans, D.C. Eaton.

Aspidium mohrioides, Bory.

Lycopodium selago, L.
Aster between Aster menziesii and Aster adscendens. Bracts of involucre more resembling the latter and general aspect the former. I have nothing just like it.

Erigeron. n.sp?

Erigeron acris, L.

Antennaria alpina, Gaertn.

Balsamorhiza terebinthacea, Nutt.

Madia sativa, Mol. A large open form.

Madia glomerata, Hook. var.: Amida gracilis, Nutt.

Arnica chamissonis, Lessing.

Senecio petraeus, Klatt. var.?

Luina hypoleuca, Benth.

Cnicus edulis, Gray.

Hieracium scouleri, Hook.

Too young.- Troximon aurantiacum, Hook?

Too young.- Troximon glaucum, Nutt?

Vaccinium ovalifolium, Sm.

Vaccinium myrtilloides, Hook.

Chimaphila menziesii, Spreng.

Phacelia procera, Gray.

Cuscuta californica, Choisy.

Pentstemon menziesii, Hook. var.?

Pentstemon ovatus, Dougl.

Pentstemon attenuatus, Dougl. probably.
Dear Mr. Corville,

I have sent Stander a list of notes on his 'Dehersi' Collection partly of my own making up and partly in answer to his question. I copy them for you or for, or whoever may have the job of looking over the specimen.

Please say to Mr. Stander that it is now arranged that my wife will not get to N.Y. before the last of January next.

Yours truly, WM. McClary

"African helicteris Dallas." The white flowers are you sent in the true plant according to most authors, but Mr. Greene, "Botanic 2 p. 214," says we do not have the African species. Consequently he calls it. 'S. lucida, Drake.' Then he explains how by saying "var. rosea" and describes this as: "var. j. 412, is called by Thomas Howell 'O. chamaedrifolia,' which is a Japanese and perhaps African species. which Parks credits to "Canada and the N.W. coast." My specimines from Japan is may not be rightly named and they are not var. 412 plant.

So that I cannot use otherwise name it than to say that it is S. helicteris Dallas, var. rosea, Lucy and S. lucida, Drake, var. rosea, Greene.
234 I am now satisfied that this cannot belong to other
capricious territories of which I have collected many spec-
cimens, I can find no description and it may be
a new sp. I think it is.

567 in our Motette Breve is quite different from the
petals, I cannot see how I made the oversight.
But there is your "M. trifida Drake, Missouri, Kortewig, U. S. A. 1877", if I mistake not the stamineae are opposite the
sepalas as they should be and the petals are their shape
or — instead of — as in true M. trifida and they
are green in the former and white in M. trifida. Vincent
in Victoria 1 p. 32. decides an M. cordifolius with petals like
this but otherwise the description does not tally.

262. Arabis, which I doubtfully called lyrate but the
leaves, are not lyrate. Specimen from Alaska is
called A. lyrate in Bent. Brit. Flora. The leaves are
not broad enough but, as so many of our Species
are large for the species can they be a gigantic A.
spathulata Ill. Any way it puzzles me.

so I called this A. spathulata, now but I see it has
Wilmington, Del. .............................. 189

furthur leaves, and so may get f. succata, Mt. when it
got its growth. These are a lot of the western species of
this genus which are very puzzling.

Here is one of them. It somewhat resembles f. Bolan-
desi but differs in the cluster, more erect pods and in
the stem leaves, which narrow to the base and are not
curvicularly. It also branches from the base which f. Bol.
desin is said not to do. Can find no name for it.

Thelepodium, I can find neither specimen nor char-
cotrine to match this. As compared with T. laciniatum,
the petals are more spatulate and broader outside the
cluster, the spike more condensed, the plant larger, no
hinge to the calyx which is of a different shape,
the leaves thicker and apparently nearly entire and
the pods more erect and with a longer style. See
a description of a Thelepodium in Vittunia 1868, 62
which however does not apply to your plant.

I am inclined to believe this is the Capinus lepidus,
Dryo; and as well f. 196 (1867) and f. 2, lees.
Rhytidium, f. 2, Kirtland's, Ohio, 1888.
Wilmington, Del., .............................................. 189

155 L. denticulatus, P. var. Lower calyx, lip sub-acute or 3-denticate, upper lip cleft, Keel very ciliate. Stamen hairy, linear orbilicate, brackets between the calyx lips.

465 L. ornatus, Dsp. - Lower calyx, lip sub-acute, upper 2-3 crenate, Keel ciliate.

402 None no name for it. In habit more like L. ornatus, but the flowers and Keel are rounded. Lower calyx, lip entire, upper 2 cleft.

215 Cannot place this either, somewhat like L. Nymthii but the lower & Keel are rounded. Lower lip less entire, upper 2 cleft.

214 L. Nymthii, Nds.

74 L. Berskii, Nds.

179 L. leucophyllus, Dsp. I suppose in spite of the smaller flowers which are like those of L. leucophyllus except that hance has not the spreading peduncles.

505 L. leucophyllus, Dsp. - L. confertus is under this number.

R. Perhaps a form of L. leucophyllus, but not satisfactorily.

557 Valerianum, styrtumia is all done see in it.

190 I called this Engenei, aduncus, both I bad the is unsatisfactorily.

476 L. macaceultra, Nds.

283 This is rare Silica pensilla var. Californica. The calyx is smooth, the upper broader. Flowers larger, more deeply cut and three for more spreading. A very fine species, perhaps new!
Mr. Caville has my juice and I cannot compare this; I can find no disciphi to suit it. It is strange, look not for a specimen of Jamaica trees with it.

Caricatatro, var. I well quire as likely not.

Alochotis, Naveania, Hochlin: exactly like specimen, so named by Naveau but the petal not hairy inside.

From Helena to the famous Love Break,
20 Poa pretensis, L. Most likely.

267 Atropis scabrella, Thurb.

87) Poa ternifolia, Burkl.

184) A variable and pulsing species.

531 Atropis (Poa) Fendleriana (stend.) Poa californica and Poa andina.

403 Agrostis alba var. gigantea, Rchb.

369) Agrostis exarata, Trin. (Small plants)

370) " "


821 Festuca ovina var?

693 Festuca Howellii, Hackel.

482) Festuca ovina var. polyfolia, Vasey.

833) " "

356 Festuca ovina var. Columbiana n. var. Same from Prof. E. R. Lake of Pullman, Washington.

98 Festuca microstachya, Nutt

291 Festuca tenella, Willd.

504 Festuca subulata, Bong.

191 Bromus tectorum, L.

399 Bromus secalinus, L.

499 Bromus ciliatus, L.
Bromus breviaristatus, Thurb.
Deyeuxia neglecta, Kth. 2 sheets of this.
Deyeuxia canadensis, Beauv.
Deyeuxia sylvatica, var. Americana, Vasey.
Deyeuxia neglecta, Kth.
Deyeuxia canadensis, Beauv.
Deschampsia atropurpurea, Scheele.
Deschampsia elongata, Munro.
* Trisetum. (n. sp. most likely. I want to see all you have to be returned if you request it.
Stipa viridula, Trin.
Stipa occidentalis, Thurb.
Stipa comata, Trin.
Melica bulbosa, Geyer.
Spartina gracilis, Trin.
Danthonia intermedia, Vasey.
Panicum dichotomum, L.
Aristida purpurea, Nutt.
Agropyrum tenerum (?) I should like to know whether it was the usual farm where collected. If much was seen.
Elhymus condensatus triticoides.
Elhymus Americanus, V. & S.
310) *Agropyrum glaucum*, R. & S.
466) " "
435) " "
331 *Agropyrum tenerum*, Vasey.
365 *Agropyrum divergens*, Nees.
583 " "
237 " "
594 *Muhlenbergia glomerata*. Small and simple spikes for the species.
245 *Hordeum jubatum*, L.
463) *Distichlis maritima*, Raf.
251) " " very variable.
307 *Sporobolus asperifolius*, N. & M.
687 *Trisetum subspicatum*, Beauv.
734 *Pleopogon refractum*, Benth.
507 *Glyceria nervata*, Trin.
604 *Glyceria pauciflora*, Presl.
230 *Polypogon monspeliensis*, Desf.

I am suddenly called to spend a week in Chicago. I mail answers to most numbers of your grasses. A few will receive further attention.

(Signed) W. J. Beal.

Oct. 28, '93.
263 Oenothera strigulosa.

28 Rumex hymenosepalus.

390 Probably Epilobium Hornemanni X alpinum, - of the general aspect of tall forms of the latter, and with white flowers, but rough seeds.

677 Epilobium Hornemanni, (with unusually large flowers, perhaps the result of hybridity, as to the Stein's Pass specimens.)

772 E. Hornemanni X? The same as Brandegee, 778, and Henderson, 2447, - the form noted on p. 107 of Revision.

731 E. luteum.