

My dear Sir

Your parcel of Wright's M. Bean plants only reached me yesterday, as Mr. Lowell did not go direct to London and I suppose this week's mail is the last that will reach Boston before you leave it. I fear therefore I shall not have time to go through all ~~your~~ ^{the} Leguminosae - the genus *Dalea* is a very difficult one on account of the great number of badly described published species wholly unknown to me. I have however done the Mimosaes which I here transcribe and between this and Thursday when my letter must be posted shall examine as many of the others as I can. - If you prefer any other names to mine do not scruple to change them.

1126 *Protopis odorata* Torr. - My *P. pubescens* Lond. Journ. S. p. 82 is the same species - I am glad Torrey's name has the priority as it is better than mine.

1127 *Protopis glandulosa* Torr. - I do not feel certain that this is a mere variety of the common *Algaroba*. If it be so the species includes *Mimosa juliflora* Sw. *Protopis dulcis* Kunth and *P. subquadratum* Dr. - Of these *juliflora* is the oldest specific name independently of genus, *dulcis* the oldest and best in the genus *Protopis*.

1128 *Desmanthus velutinus* Schleich

1129 *Acacia constricta* sp. n. (fammiferosae ~~medibracteatae~~) subglabra, spinis stipularibus subulatis divariatis rectis v. subcurvis, pinnis 2-6-jugis, foliolis parvis 6-10-jugis oblongis obtusis crassis nervibus, glandula parva scutelliformi, pedunculis medio bracteatis, leguminibus anguste linearibus complanatis torulosis glabris valvulis coriaceis. - Ramuli tenues rigidi, novelli vix minute puberuli (visciduli?). Folia ramorum sterilibus vegetiora, petiolo communis saepe 1½-poll. puberulo, pinnis 2-6-jugis, ramorum florentium glabra petiolo communis raro ½ lineas excedente, pinnis plerumque bijugis. Pinnae 2-6 lin. longae, foliola raro lineam excedunt. Pedunculi solitarii v. cum foliis fasciculati 6-9 lin. longum. Capitula parva, flores cum staminibus ½ lin. diametro. Bractea alabastro brevior. Flores 5. meri, rari 4. meri. Calyx membranaceus, truncatus, breviter dentatus. Petala calyce triple longiora, alba connata. Legumen stipitatum, 2.5 poll. longum, 1½. 2 lin. latum, inter semina constrictum, suturis breviter incompositis. - This is the only American *medibracteata* species known to me.

1130 *Acacia Attensis* var. differing from the foliage - The inflorescence appears to have been however ~~rather shorter~~ much shorter, and it may prove a distinct species when better specimens are compared.

1131 *Acacia cuspidata* Schlecht. & A. Tuckerm.

1132 } *Acacia Berlandieri* Benth.

1133 }

1134 - *Acacia rigidula* Benth.

135. *Acacia Wrightii* sp. n. (Bulgarou *Mediflora*) glabra, inermis, stipulis minutis orbiculatis, pinnis 2-3-jugis, folioli 2-4-jugis oblique obtusius oblongius, stemm retortione, pinnis elongatis lapi, floribus breviter pedicellatis, legumine late-linear plano membranaceo suarugulato glabro. - Ramuli albid. tota subfasciculata petiolis communis 2-6 lin longis, partialibus 1-6 lin. glandulis parvis convexis. Petiolis minime ad basin pinnarum. Totola rigida, 2-3 nervis ultimis 3-5 lin. longa, 2-3 lin. lata, fere crenidate, inferiorem roquis minoris.

Pedunculi 1/2-2 pollicares, pinn supra medium interrupte floriferi. Stomula minutis. Pedicelli calyc breviores. Flores cum staminibus fere 2 lin longi, alique staminibus sua brevioribus, pedunculis. Calyx semi-5-fidis membranaceus, glabr. Petala 3-pathulata, una basi subconnata, margine truncatis, ciliolata, calyce duplo longiora. Legumen stipitatum subfalcatum, 2-3 pol longum, 2-4 lin latum. This species much resembles the *A. hamulata* and other *African* species among the *Alayacanth* as well as *A. rigida* and *amentum* among the *Gummifer*, but then is no vestige of any stony or priddy. The specimen from Gregg is also one which you believe to be the *A. amentum* is the one which I also should take for that plant.

136 *Acacia hirta* Mill.

137 *Acacia retusa* sp. n. subglabra, pinnis 2-3-jugis, folioli 5-8-jugis oblique obtusius v. late-oblongis obtusius-retortione membranaceis nervosis pedunculis capitulis longioribus, legumine subcoriaceo marginibus subseriatis. - Gemmae et folia novella pubi tenui flavescunt, ramuli et folia adulta glabra sunt. Agulae membranaceae puberulae fasci oblique et lateri, in acumen subulatum 1-3 lin longum densatae. Petiolis hinc, communis 3-4 pol longi, partialibus brevioribus. Glandulae parvae elevatae, fere stipitatae. Totola plerumque 2-10 lin longa, 5-6 lin lata, nervosa fere dimidio minoris, basi valde obliqua, late ovata 3-5 nervosa et reticulata. Pedunculi floriferi pollicares, pauciflori bipollicares, capitulum fere 1/2 glaucum, lat. ovatum stipitatum lamina petiolata ovata subulata acuminata supra villosa. Calyx 1 1/2 lin longus, tubulosus, membranaceus, apice breviter 5-dentatus. Petala aequalia oblonga, calyce paulo longiora. Stamina 10, antheris glabris. Legumen 6-9 pol longum, 6 lin latum, rigidius et crispius marginatum, quam in *A. hirta*. - This general appearance of the foliage of this species is that of some *Albizia* allied to *A. Mill.*

138 *Acacia malacophylla* sp. n. (Bulgarou, *Pennata*) scandens? mollior puberula, oculis subcurvis parvis raris, pinnis 2-3-jugis, glandulis parvis, folioli 6-10-jugis obliquis obtusius oblongius obtusius-retortione mollioribus puberulentibus, capitulis globosis, legumine late-linear glabro. - Pubes mollior communis ramulorum et folia undique oblonga v. ret. Petiolis communis, tenuis, 2-3 pollicares, partialibus brevioribus. Petiolis 5-6 lin longis, oblique nervis.

Pedunculi pauciflori squamulosis. Legumen 4 pol longum, 9 lin latum, falcatum, basi acutum et breviter stipitatum, planum, graviter subcoriaceum, margine leviter incurvato. - Although the specimen is in fruit only, the remains of the flowers at the base of the pod leave no doubt as to the genus and affinities of this plant, although it is so very different a species in the group to which it belongs.

139 *Calliandra herbacea* Engelm?

139 b.c. *Calliandra conferta* sp. n. humilis, ramulis petiolisque puberulentibus pinnis unijugis, folioli 2-4-jugis parvis oblique oblongis subcoriaceis mollioribus sericeo-retortione, pedunculis petiolis brevioribus longioribus subcoriaceis, floribus parvis subsessilibus petiolis, calyce corollae dimidium aequante, legumine ad apicem villosa villosis, membranaceo coriaceis, crasse marginatis - fructibus semipodis, tegulae dimidiatas subulata, lineam longa. Petiolis communis stipulis per brevior. Brachia semi-pollicares, folioli vix 2 lin longi conferti, molli longis paginae inferiorem obtusius, nervis glabrimulibus. Pedunculi subfasciculati 2-3 lin longi. Flores capitulis 5-9, staminibus neglectis vix 2 lin longi. Calyx breviter 5-dentatus. Stamina (ex sicca) pallida, vix semi-pollicaria. Legumen sessile, basi longi an. quadratum, 1 1/2 pol longum, 3 lin latum. - This species rank with the *Calliandra* near *A. brevipes*, and is readily distinguished by its small stature, few leaflets and flowers and very hairy leaves. In these respects it is nearest *C. eriophylla*, but appears never to have more than one pair of pinnae, and the form and proportions of the flowers are different.

140 *Derranthus* - The specimen is not in a state to enable me to distinguish it from *D. Depreux*, although the pod is so much more rigid. The glandulae, angular stem and general habit, besides the examination of a very young bud, leave no doubt that it is a true *Derranthus*.

141. *Calliandra Californica* Benth. var.? - at least the specimen such as it is, does not enable me to distinguish it from one of the forms of that plant which I had from Benth. but *Calliandra*, require good specimens to distinguish them well. - The one you sent me from the Cambridge garden as raised from New Mexican seeds is surely *C. Tweedii* from J. B. Ward's plant now in cultivation and some mistake must have occurred in the nursery as so often happens.

142, same as 135 (*Acacia Wrightii* sp. n.)

143 *Simmona malacophylla* according to your label where it is described? It is a good species of the *Habbania* Rubiculae.

144. *Simmona glauca* sp. n. (America *Acanthopora*) fruticosa, ramis petiolisque ferrugineis villosis, oculis parvis validis subcurvis, pinnis 6-10-jugis, folioli 2-10-jugis oblongis acutis sericeo-villosis, capitulis oblongis, floribus pentameris villosis, calyce corollae dimidium aequante, legumine linearis falcatas dense tomentosis inermis. - Stamulorum oculis roquis subulatis raris inflorescunt, petalorum ~~subulatis~~ parvis. Agulae subulatae,

rigidae, villorae, 2-3 lin. longae. Petioli communes 1 1/2 pollicares, pinnae semi-pol-
licares, foliolis confertis 1 1/2 lin. longis. Stipulae minutae setaeae. Pedunculi
axillares, semipollicares, tomentosi. Capitula junc deplorata, rachis 4-5 lin.
longa. Calyx fere lineam longus, membranaceus, breviter 5-dentatus. Stamina
10. Ovarium villoripinum. Legumen 1 1/2-2 pol. longum, 2-3 lin. latum, apice
rigide acuminatum, fere pungen, tomento nuperscente dense vestitum, valvulae
continuis (an denum interdum in articulos recedentibus?) This species ap-
pear in some respects to connect the Habbasia Batauea with
the America Acanthocarpa, but in my specimens the pod appears to be
continuous, and the habit and small leaves are those of the Acanthocarpa.

145 Mimosa biuncifera Benth

? 146? (There was no label, but I suppose it to have been 146 from being
on the same sheet as 145) Mimosa monacantha Benth.

147 Mimosa flegura sp. n., (America Acanthocarpa) fruticosa, minute
provincio-puberula, aculeis infrastipularibus geminis conicis rectis, pinnae
6-8 pignis minimis oblongis obtusis crassiusculis puberulis, capitulis globosis
legumine lineari rectiusculo minute cano. puberulo margine tenui aculeato.
— Ramuli rigidi, flegurosi, albedi. Aculei caulini circa 2 lin. longi, petio-
lari minutissimi. Stipulae minutae, setaeae. Petioli communes vix
semipollicares. Pinnae confertae, 2-3 lin. longae. Foliola fere imbricata
semilineam longa, rigidula, laetivirentia, utrinque puberula, obtusa v. rarius
mucronulata. Pedunculi prostrati 2-3 lin. longi. Legumen pollice paullo
longius, vix 2 lin. latum, rectum v. leviter patcatum, crassiusculum
aculeis marginalibus irregularibus rectis. — This appears to be nearly
allied to the New Mexican species of which you sent me a fragment
in a letter some time since, but in my opinion specifically distinct
especially in the pod.

148 same as 129 (Acacia constricta sp. n.)

100 is Crotalaria lupulina

101 is quite unknown to me Can it be a Rhynchosia?

97 look like a new Indigofera

978

27

Mimosa (Puroria) zygoxanthos, glabra, acutis. inflorescences solitary ovoid,
pinis foliolisque unijugis, his parvis oblique orbiculatis crassiusculis, pedunculis
foliis sublongioribus, capitato globoso, floribus pentameris, legumina glabra
subfoliatis acutiusculis marginibus nudo v. parva aculeata

La Laguna towards San Juan 30 miles from Saltillo *Wrightii*, near
Saltillo *Gray*.

Allied to *M. Depauperata* but perfectly glabrous the leaflets rather larger
and thicker (from 1 to 1½ lin. long) and never more than one pair on each
pinnaule of which also each leaf has but one pair. The pod from one
inch to an inch and a half long, is reddish and rather glaucous in the dry
state very smooth ending in a very sharp point. I have only seen the
flowers in a withered state.

Acacia (Vulgaris) (Middendorfi) Coultteri, glabra v. minute puberula, curvata,
stipulis minutis obrotundis, petioli glandulis parvis oblongis, pinis 3-5-jugis
foliolis 10-25-jugis oblongo-linearibus valde obliquis obtusis v. acutiusculis,
spici elongatis apiculatis sagittatis, floribus reflexis puberulis, calyci corollae
dimidium aequante, ovario stipitato glabro, legumine late linearis glauco nigro
nudo puberulo valvulis trigynis

Zimapan Coultter (without any st.) West Texas Wright 1899

Allied to *A. aculeata* but quite distinct and *A. Wrightii* but perfectly
distinct from both. The leaflets are about 3 lines long and scarcely a line broad
the spikes from 2 to 2½ inches long, on a very short peduncle, and the flowers
not at all covered & often distant from each other. They are including the
stamens, about 2½ lines long, the corolla itself about one line. The pod,
at least 3 inches long and nearly one inch broad, covered with a minute
down and obviously veined w. of a much thicker and firmer construction
than that of *A. Wrightii*.

The pod of *A. floribunda*
Wrightii's collection includes a specimen of *A. floribunda* seeds
with fully formed pods which are about four inches long, nearly
an inch wide, falcate exceedingly thick and convex, almost
woody, and divided between the seeds by a ^{thick} dry pulp acedulous
as in *A. farneiana*.

the habit and foliage of *H. stricta* or *demissa*, ^{without black dots on the leaflets,} has the flowers nearly those of *H. Drummondii* and a pod straight or slightly curved, blunt at the apex, with the upper or ~~reticulate~~ ^{conspicuously} ~~seminal~~ ^{magnified} suture more or less convex, and usually broadest below the middle. The second group (*Scumatoe*) would include *H. oxycarpa*, *Drummondii* and *caudata* with a variable habit, the leaflets without black dots and the pod ^{conspicuously} ~~seminal~~ ^{magnified} ~~reticulate~~. *Stamina* 10. *ovum* *anthropospermum*. *Ovula* circa 8. [May 6 1890]

110. *Hoffmannseggia demissa*, n. sp., stipulis late ovatis, caule foliisque puberulis eglandulosis, pinnis 4-6-jugis cum impari, racemo lato breviter pedunculato calycibus pubescentibus et stipitato-glandulosis, vexillo dense stipitato-glanduloso ungue dilatato, legumine recto v. vix incurva polyspermo. — Caulis basi perenni brevissimus, v. breviter et lato ^{ramosus} ~~ramosus~~. Folia in *H. falcaria* nimidia at minora. Pedunculus cum racemo 3-2½ poll. longus, ramis infra medium floriferis, bracteis caducis pedicellis 1-2 lin. longis, floriferis patulis, fructiferis reflexis. Calyx majoris petala paullo minoris quam in *H. falcaria*. Ovula circa 12. Legumen 1-1½ poll. longum, vix 3 lin. latum.

The above two species with *H. stricta* (Hort. Coll. Trin. Decb. 2 acateas, Coulters) agree with *H. falcaria* in their most important characters, the stipules are broad ovate, ^{blunt} ~~membranous~~, scarcely pointed, the petioles long and slender with usually 3 or 4 but sometimes 5 or 6 pair of pinnae each bearing 6 to 10 pair of obliquely oval oblong blunt ^{crowded} ~~newly~~ leaflets without any odd one, the common petiole however always in my specimens terminated by an odd pinna usually rather longer than the lateral ones. In all the divisions of the calyx are linear-oblong, rather blunt, equal or the lower one rather shorter and broader, generally persistent but sometimes falling off before the fruit is ripe. The four lower and outer petals ~~born on~~ ^{are} nearly equal and scarcely oblique, obovate and narrowed into long claws which bear copious stipitate glands on their inwardly turned edges. The upper and inner petal or vexillum is equal in length but very differently shaped, it is concave or folded, the lamina ~~rather~~ smaller than in the others, the claw is expanded in the middle, and the copious stipitate glands are on the back instead of the front, covering the claw and the lower part of the lamina. The stamens straight, nearly equal (the lower ones rather longer) ^{the filaments} more or less furnished with rigid hairs and a few stipitate glands (the latter sometimes wanting).

(*) *H. stricta*, stipulis late ovatis, ramis foliisque puberulis parce glandulosis glaberrimis, pinnis 4-6-jugis cum impari, racemo stricto pedicellis divitis suberectis calycibusque pubescentibus et stipitato-glandulosis, vexillo dense stipitato-glanduloso ungue dilatato, legumine falcato glanduloso. — Habit of *H. demissa* but differs in inflorescence and pod.

117, 120 *Hybanthus* *scabra* Desv. fl. n. stipulis lat. ovatis, cauli foliisque paucis glandulosis, pinnis 3-5-jugis cum impari, racemo pedunculato paucifloro, dense subcapitato calycibusque dense pubescentibus et parvis glandulosis, vexillo dense stipitato glanduloso ungue dilatato, legumine.... — Caulis & basi pinnarum humilis nunc fere pedalis simplicis v. parvis ramosis. Folia et stipulae ellipticae. Pedunculus foliosus paulo brevior foliolis confertis magnitudinis *H. falcatae*. Stamina 10 omnia antherifera. Ovula circa 8. [May 6 1850]

118. *Hybanthus* *scabra* Desv. fl. n. stipulis lat. ovatis, cauli foliisque pubescentibus glandulosis, pinnis 4-5-jugis cum impari, racemo saepe breviter pedunculato calycibusque pubescentibus et stipitato glandulosis, vexillo dense stipitato glanduloso ungue dilatato, legumine recto v. curvato polygamio. — Caulis & basi pinnarum brevissimus, v. breviter et long. *Hybanthus*. Folia in *H. falcatae* similia at minora. Pedunculus cum racemo 3-5 poll. longus, paucis infra medium floris, bracteis adnatis pedicellis 1-2 lin. longis, filiformibus patentibus, fructiferis reflexis. Calyx majoris petala paulo minor quam in *H. falcatae*. Ovula circa 12. Legumen 1-1½ poll. longum, usq. 3 lin. latum.

The above two species with *H. stricta* (Hort. Coll. Trin. Barb. Zacatecas, Ovettia) agree with *H. falcata* in their most important characters, the stipules are broadly ovate, membranous, ^{slender} rarely pointed, the petals long and slender with usually 3 or 4 but sometimes 5 or 6 pairs of pinnae each bearing 6 to 8 pairs of obliquely oval oblong blunt nervellid leaflets without any odd one, the corolla petals however always in my specimens terminated by an odd pinnae usually rather longer than the lateral ones. In all the divisions of the calyx are linear oblong, rather blunt, equal or the lower one rather shorter and broader, generally persistent but sometimes falling off before the fruit is ripe. The four lower and outer petals ~~are~~ nearly equal and scarcely oblique, obovate and narrowed into long claws which bear copious stipitate glands on their inwardly turned edges. The upper and inner petal or vexillum is equal in length but very differently shaped, it is concave or folded in the middle, and the copious stipitate glands are on the back instead of the front, covering the claw and the lower part of the lamina. The stamens straight, nearly equal (the lower ones rather longer) more or less ^{the filament} furnished with rigid hairs and a few stipitate glands (the latter sometimes wanting).

(*) *H. stricta*, stipulis lat. ovatis, pinnis foliisque pubescentibus parvis glandulosis, labrative pinnis 4-5-jugis cum impari, racemo stricto pedicellis divinis suberectis calycibusque pubescentibus et stipitato glandulosis, vexillo dense stipitato glanduloso ungue dilatato, legumine falcato glanduloso. Habitat of *H. scabra* but differs in inflorescence and ped.

the five inner filaments always less hairy than the five outer, and all ten (in all the flowers I have examined) atheriferous, the ovary glandular, the style smooth, club-shaped at the apex, with a contracted opening more or less ciliate, but these ciliae and the thickening of the apex appear & vary according to the age of the flower. The pod is flat the margins slightly thickened and the apex remains blunt after the falling off of the style. There four species with *H. trifoliata* Cav. (Porto Verme, Middleton!) differing in its foliage, and *H. gracilis* Post. et Don (Chile Cumming 1880!) and *H. prostrata* Lag. (Kima Cumming n. ~~1880~~¹⁸⁸⁹) in both of which the petals are scarcely glandular and the claw of the vexillum long and narrow, would form the section of *Hoffmannseggia* proper. The *H. viscosa* Post. et Don (W. Columbia Cumming n. 1175! and Peyta Landichand!) may be also referred to the section same section although the claws of the petals are shorter and the pod less marginate and more readily dehiscent. The *H. glandulosa* Vag. from South America, which I have not seen but must be very near *H. viscosa* but with a very long glandular raceme (*oxycarpa* unless it is already named in Gregg's collection)

119, *Hoffmannseggia*, sp. n., stipulis ovato-acutis integris, ~~cacae~~ pinnis 3-6-jugis cum impari foliolis oblongis cuneatis glandulosis calycibus obtusis velis parvis glandulosis, petalis elliptico-oblongis subnatis brevissime stipitatis, legumine falcato acutissimo stipitato-glanduloso. — Foliage nearly that of *H. falcata*, flower of *H. Drummondii*, but with rather narrower petals. Pod an inch or more in length and not above 3-lines broad

120 same as 117 *Hoffmannseggia densiflora*.

121 *Hoffmannseggia melanocantha* (S. Schauer Linnaea 20 p. 74. 8. sub *Pomaria*) at least as far as the specimens go which are in fruit only. They perfectly agree with Schauer's description, but distinct from *H. Janerii*? which would be the oldest name.

122 same as 119 *Hoffmannseggia* (*oxycarpa*)

123 *Hoffmannseggia Drummondii* Torr. & G.

124 *Hoffmannseggia caudata*, from your label where described?

If we consider the section *Pomaria* as characterized by the nearly sessile petals only differing from each other in the vexillum being rather broader all with few or no stipitate glands (where they exist they are generally dorsal on the vexillum), we may subdivide it into three or four distinct groups. The first (*G. gladiatae*) including *H. gladiata* Herb. Coll. Trin. Dubl. (Rimapan Coulter) and *H. platycarpa* Herb. Coll. Trin. Dubl. (Mexico Coulter) ^(a) with

(a) *H. gladiata*, stipulis ovato-acutis, pinnis 3-6-jugis cum impari foliolis oblongis cuneatis glandulosis, calycibus acutis brevibus glandulosisque, petalis oblongis brevissime stipitatis legumine ^{lanceolato-rabeneus} subfalcato hirsutis et parvis glandulosis.

(b) *H. platycarpa*, stipulis ovato-acutis, pinnis 3-6-jugis cum impari, foliolis oblongis cuneatis glandulosis, calycibus acutis hirsutis glandulosisque, petalis ovatis vix stipitatis, legumine lato-oblongo pubescente stip glandulosis



Bentham, George. 1850. "Bentham, George May 6, 1850." *George Bentham letters to Asa Gray*

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