

GEORGE ENGELMANN  
BOTANICAL NOTEBOOKS

*Pagination Note:*

*Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.*



ering.

*Dimensions.*—Length, 0.20 of an inch; width, 0.18.

The *Elæacrinus Kirkwoodensis* is nearly allied to *E. (Pentremites) melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

8

82

*Elæacrinus* ?

see No 82

near Haverbe



0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN



cumstances prevented ~~the~~ more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.

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June

Feb 3 1866

Kept two flowers

name Haenkei? H. Mack Carpenter  
in Hb.



*Eujunon aphylla?*  
panicula simplex  
flores maximi



culmus 1 1/2  
pollic  
folia vaginale 10 1/2 pollic.  
ita ut anthera in  
medio culmo  
sessilis videtur



culm. terete

scissily in flower



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minima will make this still plainer.

The yearly mean of temperature is..... 56.2  
 " at 9 A.M. ... 54.4  
 " at 6 P.M. ... 58.1  
 " at 3 P.M. ... 62.3  
 " at 9 P.M. ... 53.3

The yearly mean of relative humidity is..... 69.2  
 " at 9 A.M. 70.6  
 " at 6 P.M. 65.8  
 " at 3 P.M. 56.9  
 " at 9 P.M. 77.0

TEMPERATURE.		RELATIVE HUMIDITY.	
9 A.M.	54.4	9 A.M.	70.6
6 P.M.	58.1	6 P.M.	65.8
		YEARLY	56.9
		MEAN.	69.2
			77.0
			9 P.M.

It becomes thus apparent that temperature and humidity approach both at 9 A. M. and at 6 P. M. their yearly mean and come to a state of equilibrium, producing the maxima of electricity; while at 3 P. M. and 9 P. M. the divergence from the yearly mean becomes greater, producing the minima. The approach would probably be still nearer and the divergence greater if I could make my observations every hour in the daytime, and could continue them through the night till

a form of *Dalmanea*  
 seeds different

*Dalmanea*  
 subsp.  
*Pacifica*

85-96

Linna 3. 368

*J. compressus* var. *Haenkei* Meyer  
*J. Balticus* Meyer - Flor. Ross.

Remth 3. 317  
 Ledeb. 4. 222

4  
 Lesueurii (det)  
 1855  
 Juncus Haenkei Meyer  
 Syn. June 10 1879  
 J. compressus Chamisso & Meyer, Chili





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1881



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*Juncus Lesueurii*

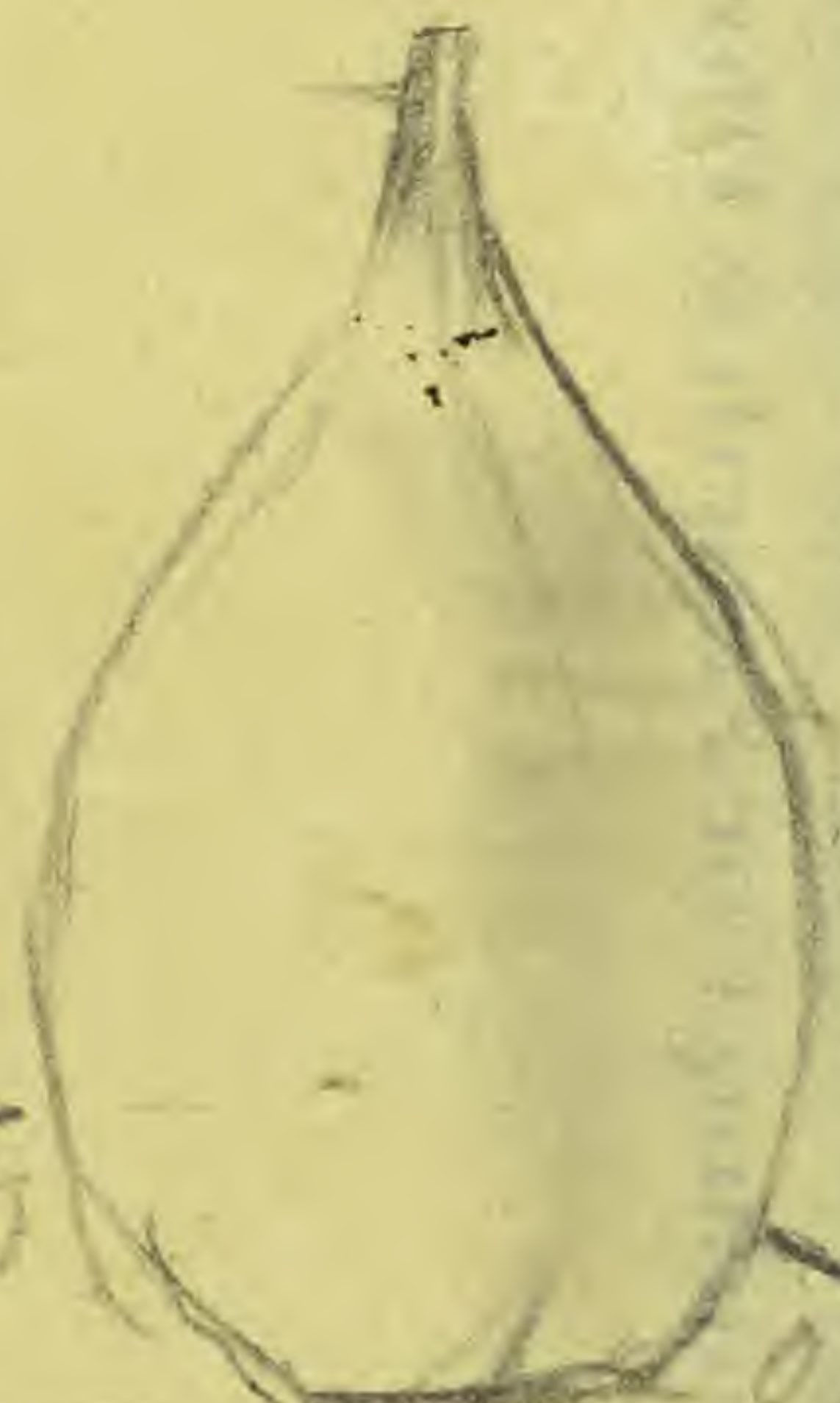
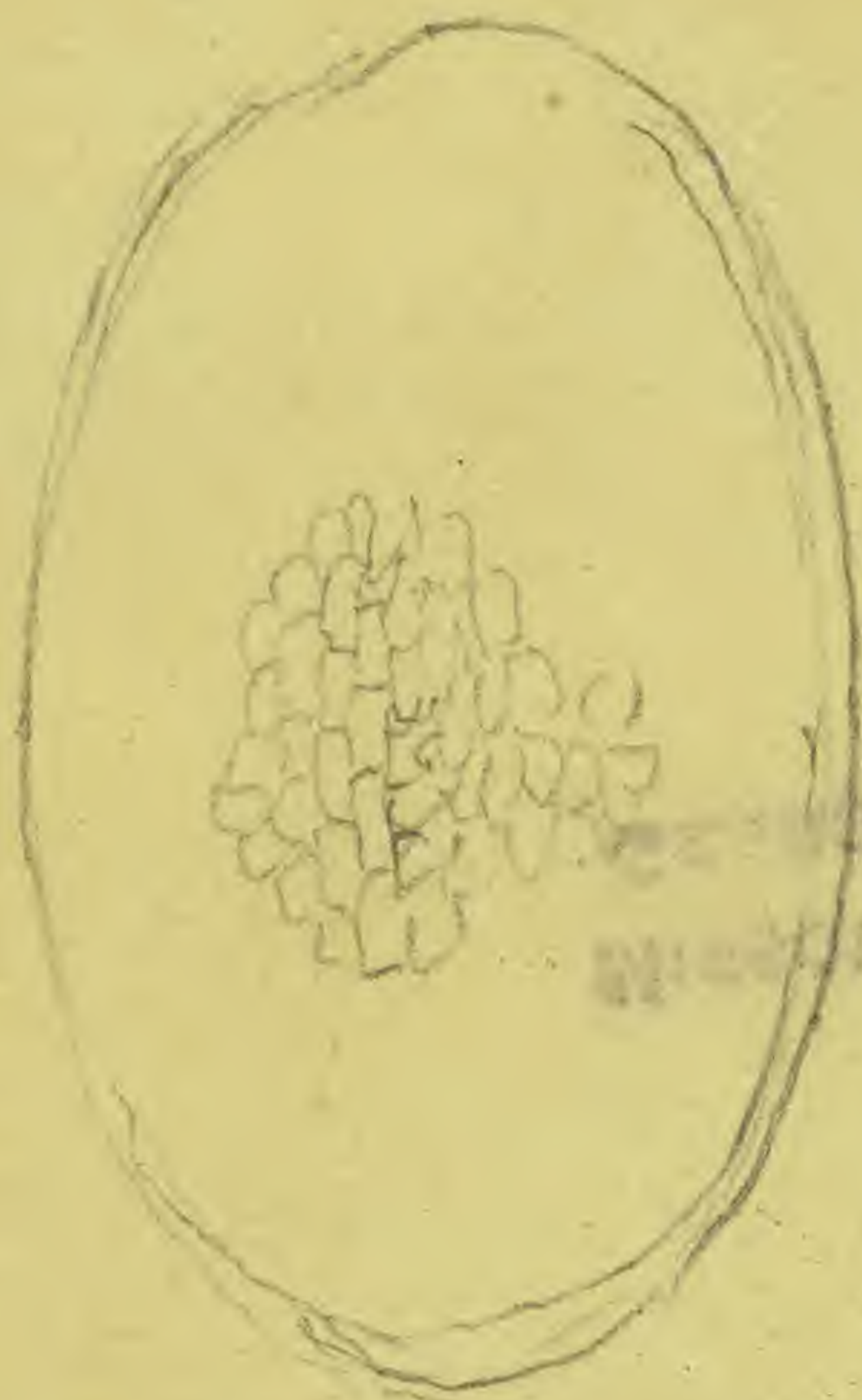
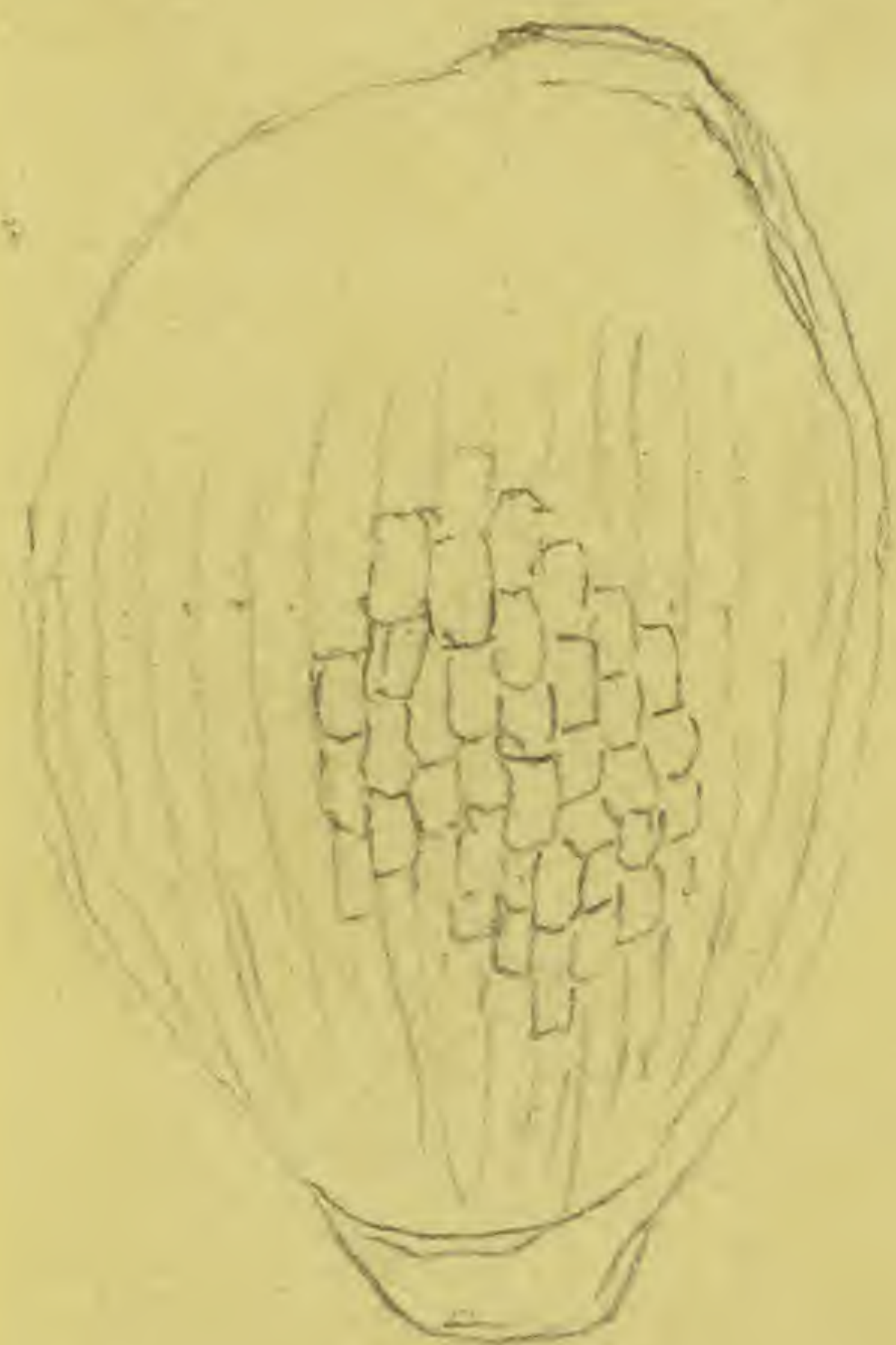
Aug 11 1867

Hb. nom. 6

J. A. Kellogg

Aug 12 1866

Bolina Bay



15-16 imbricated

ribs

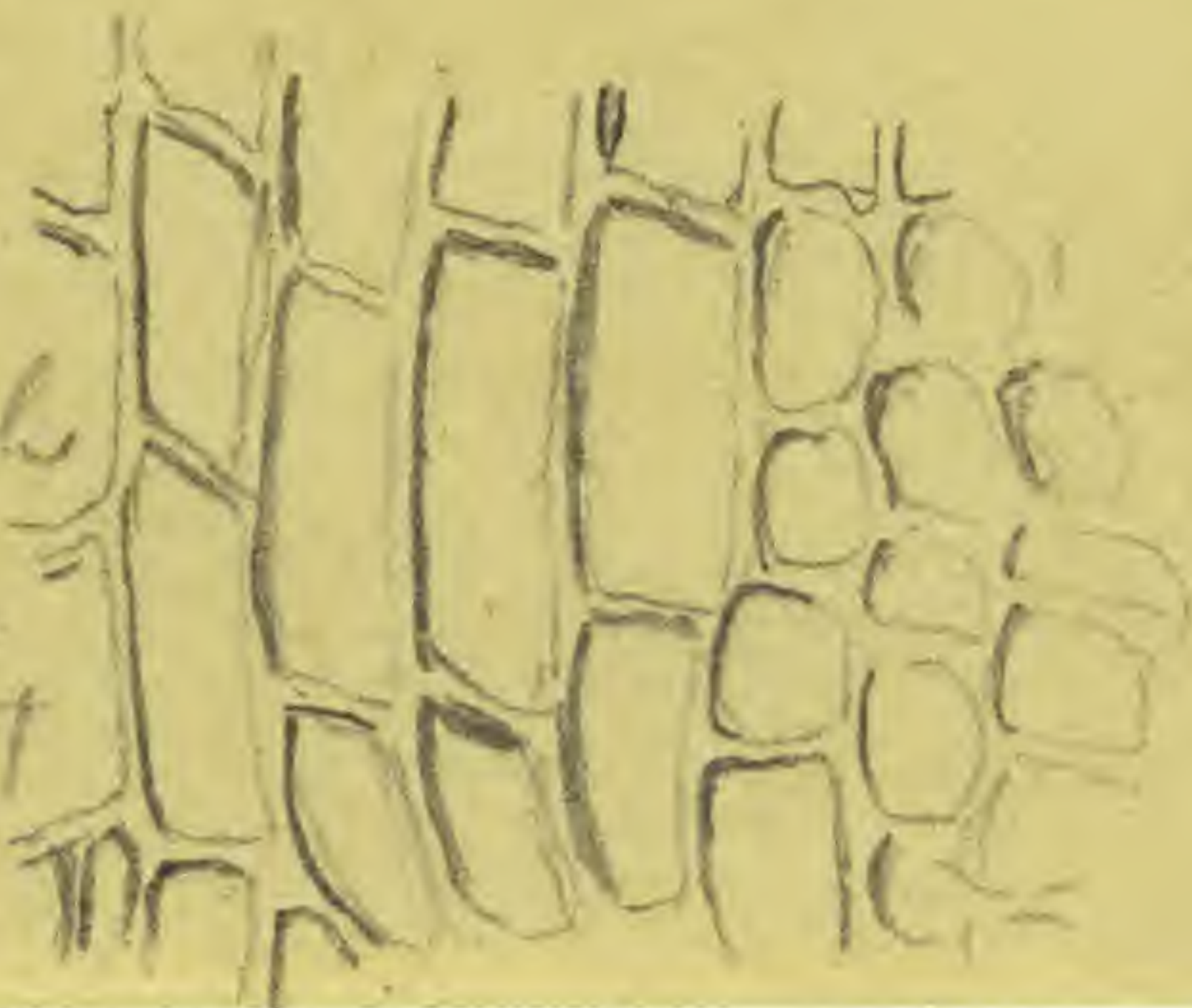
reticulate

sculptures

quite imbricated

at other places

very distinct



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Aug 12 1880 City on coast, near Coase Bay

*Junonia desman* - Yapp Land  
stem hollow



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8 Roy 50  
 No 9 *Pinus* *resinosa* *Ait.* *Mill.*  
 wood *H. summit*, probably 4000' alt  
 8983 *perhaps 3000 - 4000.*



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Juncus Tesueneri Bolander in Proc Acad Calif 2. 179

(coll 1863)

Outer sepals linear-lanceolate sharply acuminate (3")  
the green back faintly 6 nerved below, hyaline margin  
slightly exceeding the inner ones  
inner sepals acuminate, green on back, faintly  
3 nerved below,

Ovary oblong; style as long as ovary, stigma long  
filaments  $\frac{1}{3}$  the length of anthers

Capsule abruptly long pointed, obovate triangular,  
half the length of sepals  
Seeds oblong smooth.

stem with leafless sheaths 1-3 feet high

Panicle lateral, bract (sheath?) 3-7 inches long  
perianth.

Submushes: bay of San Francisco.

Octob - Novemb

= parviflorus? = Bolanderi?



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Cor. Second & Walnut, under Barnum's Hotel,

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6868



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cm

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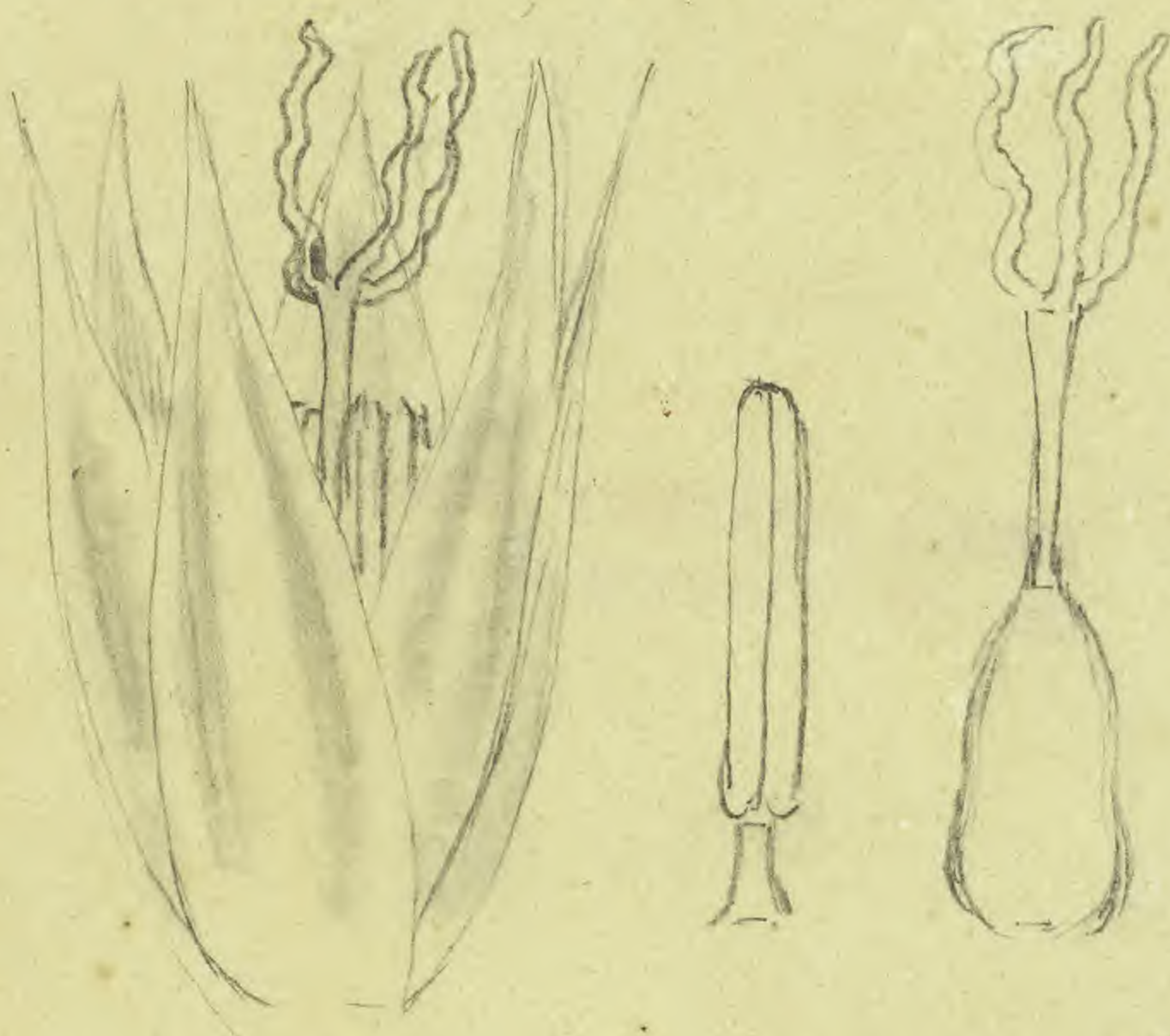
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*Scirpus Bullianus* fide Benth. Jan 14 1865

2018 Hartweg in humidis Vallis Sacramento  
etiam sicca Pl. Hartweg. p 341

ex Hb Gray



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NO. 113, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300



scarcely in flower



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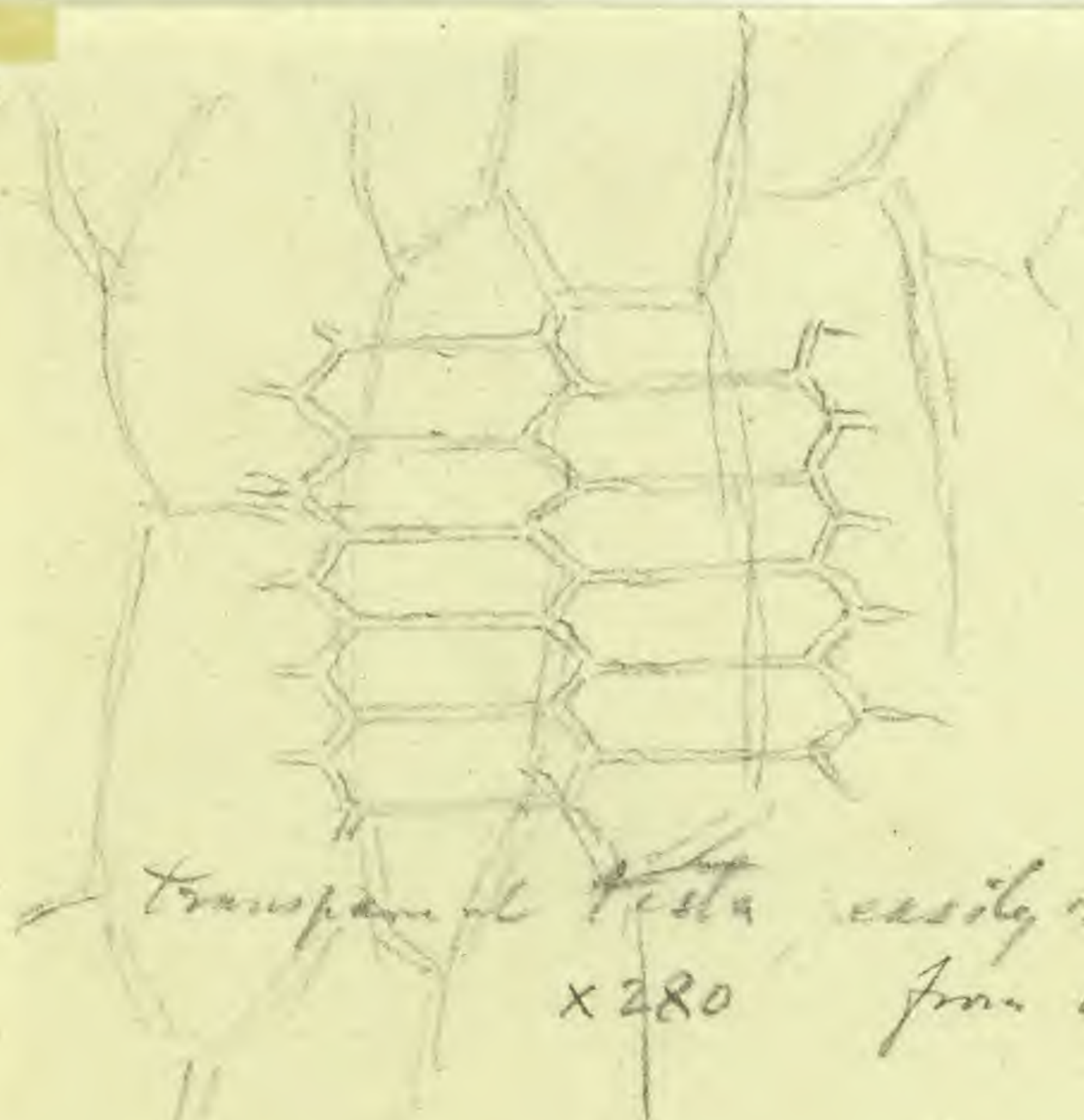
*Juncus Pacificus*

Dec 5 1867

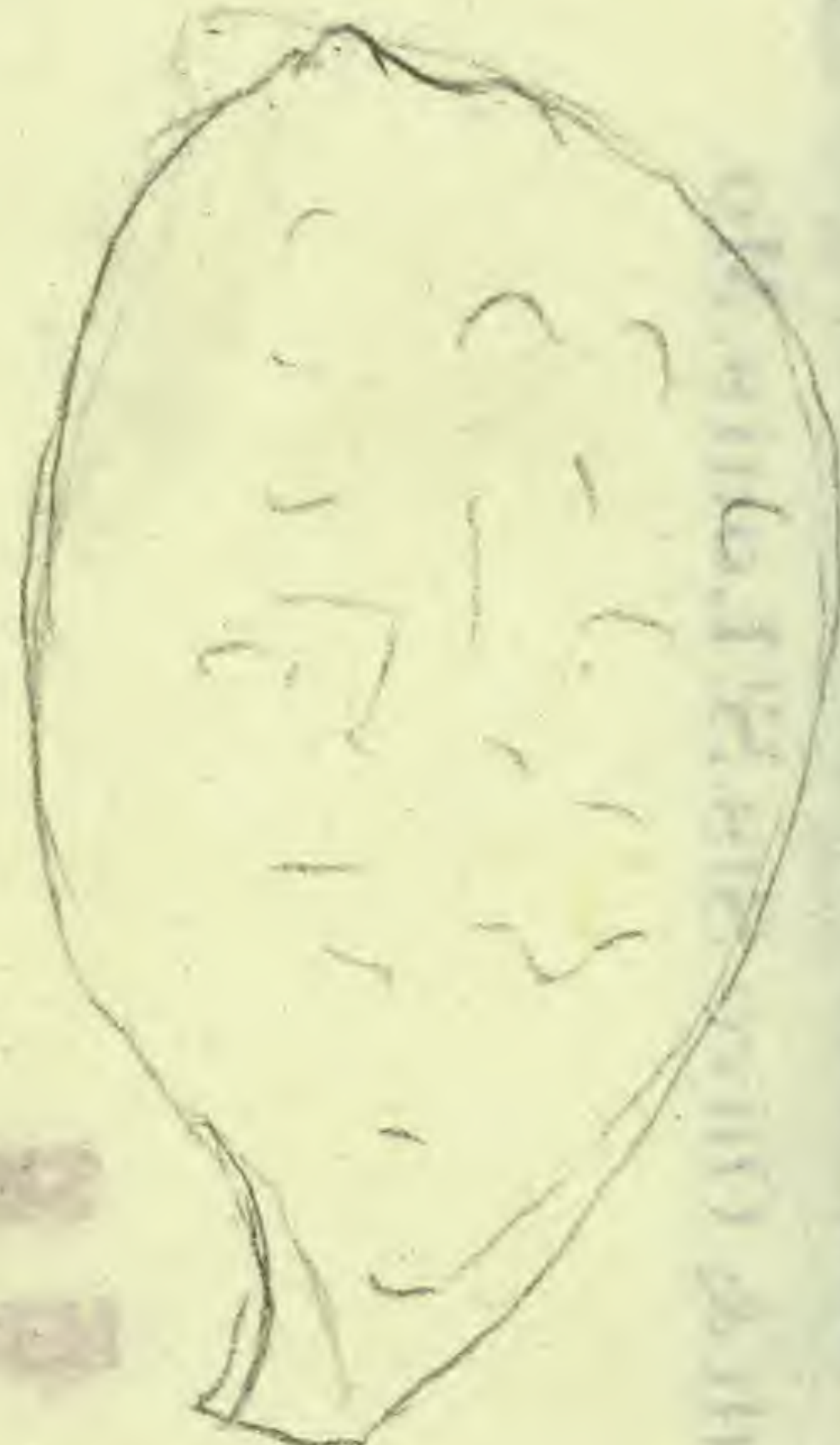
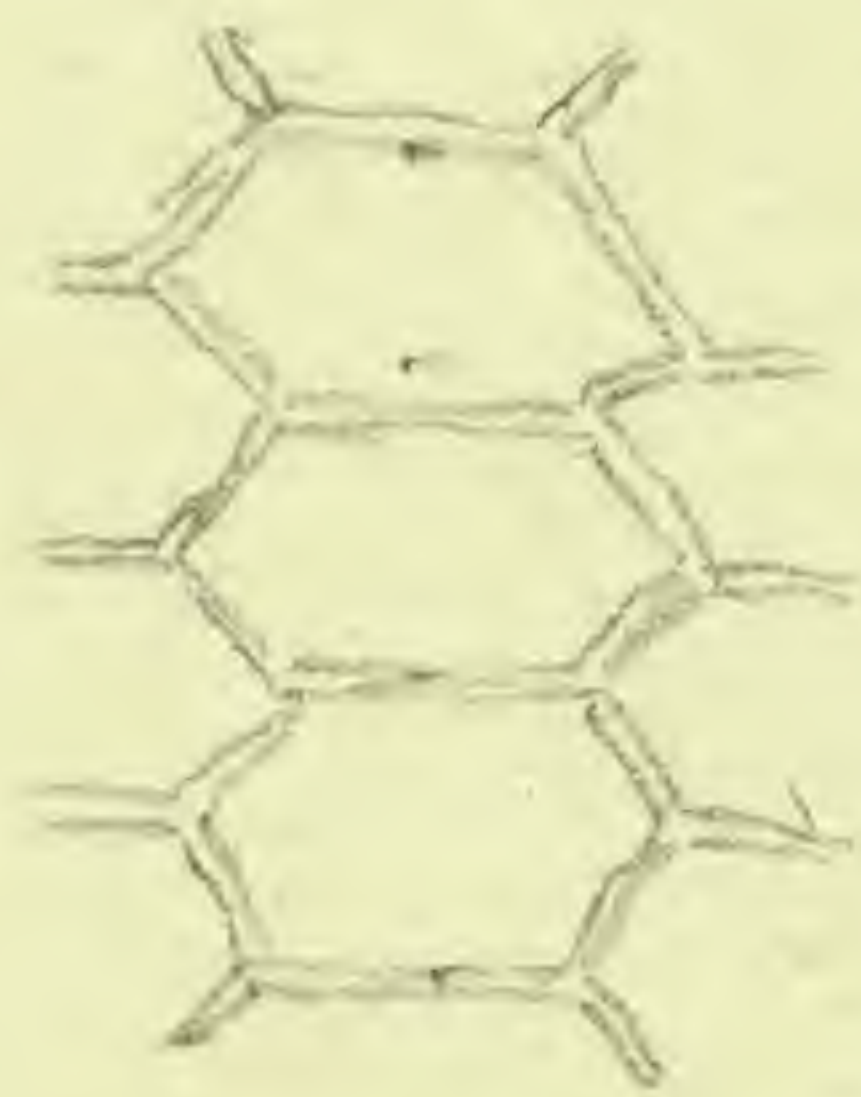
ripe seeds sent by Bolander

citab

67



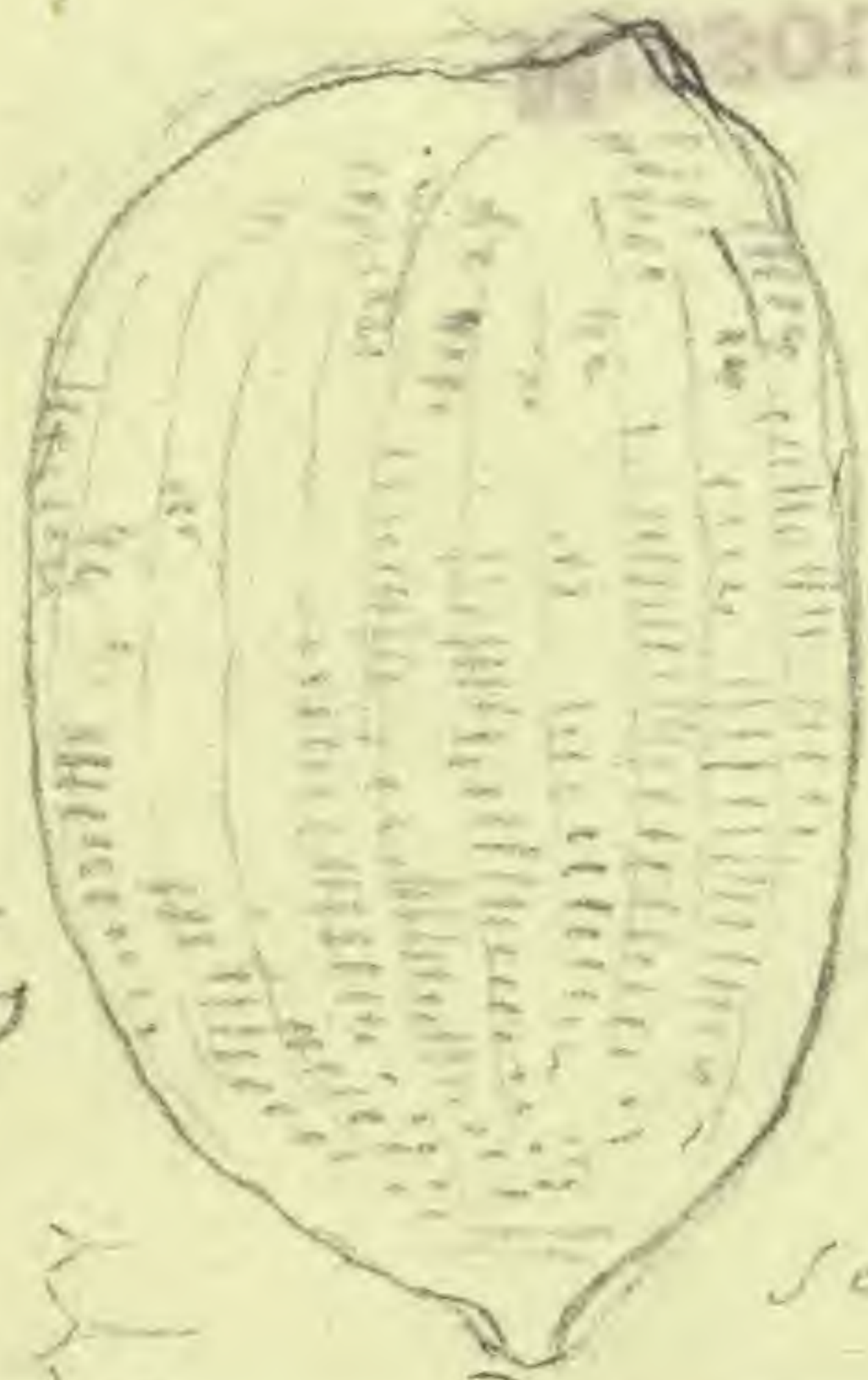
transparent testa easily removed from dry seed x280



same x150



seeds x60



seed after removal of testa



The thick testa becomes transparent & mucilaginous in water and consists of 2 layers of cells, one (external?) with large longitudinal cells, the other (internal?) with small cross cells, the impression of which leaves the marks on the naked seed



marks on shelled seed

marks on shelled seed



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*Juncus*  
158. Saltmarshes, San Francisco

Aug 29 1865  
Bolander 1865

x60



not ripe



irregularly reticulate  
pitted  
scarcely  
striated



x150

sepal green in middle  
brown both sides  
and white membrane on margin

inner sepals  
obtusish, a little shorter  
than acuminate awl  
outer ones, capsule = outer  
ones



not very correct! Nov 19!



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cm

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1868

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*Junonia Pacificus*  
158 Seldmanshus, San Francisco, Bolander 1864

Nov 19 1865

not quite ripe



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last  
my own handwriting

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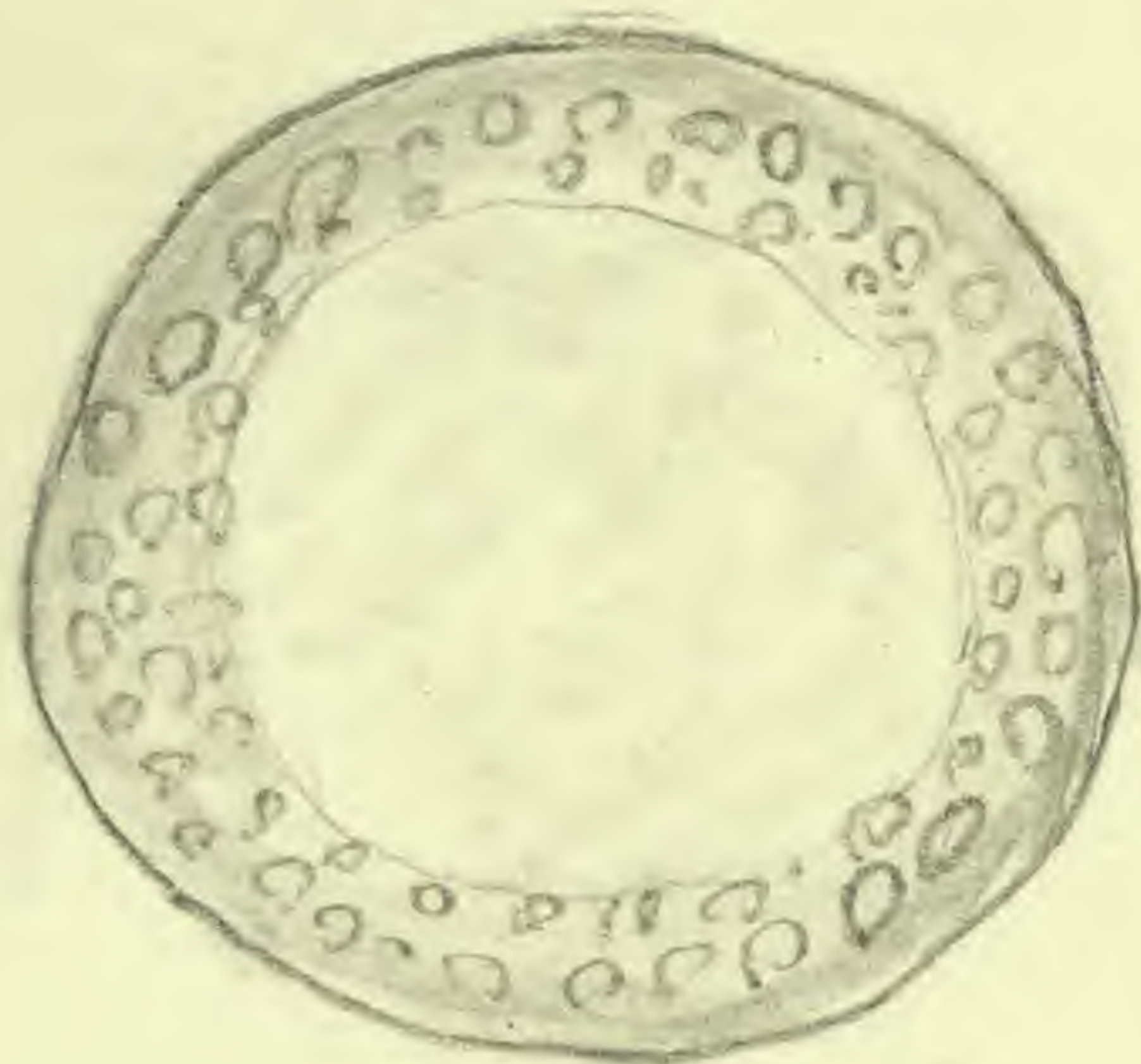
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*Desmodium*

Aug 29 1865

158 Sallmanus, San Francisco



x10

Largest scapes  
3 mm diameter  
Smallest ones  $1\frac{1}{2}$  - 2 mm  
all terete - facet.  
but soft, compressible, flat  
when dry - Herb.

With the exception of the  
leafless terete scape I find no  
difference between this  
and the San Pablo plant  
of Gregg; the seed of the  
latter is too unripe to  
offer characters -  
the style seems shorter  
in the San Francisco plant

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"*J. vaginatus*"

"*Juncus vaginatus*"

March 15 1866

Tasmanian, Juncus, - Hb Gray

Why not *J. procerus* Meyer?  
(Chili)

larger specimen

true *vaginatus* fide Buchanan  
May 1868



very young seed  
or rather germ



5 feet 10" high  
7 inches of which belong to  
sheathing leaf



seen once



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8990

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*[Faint handwritten notes and bleed-through from the reverse side of the page]*

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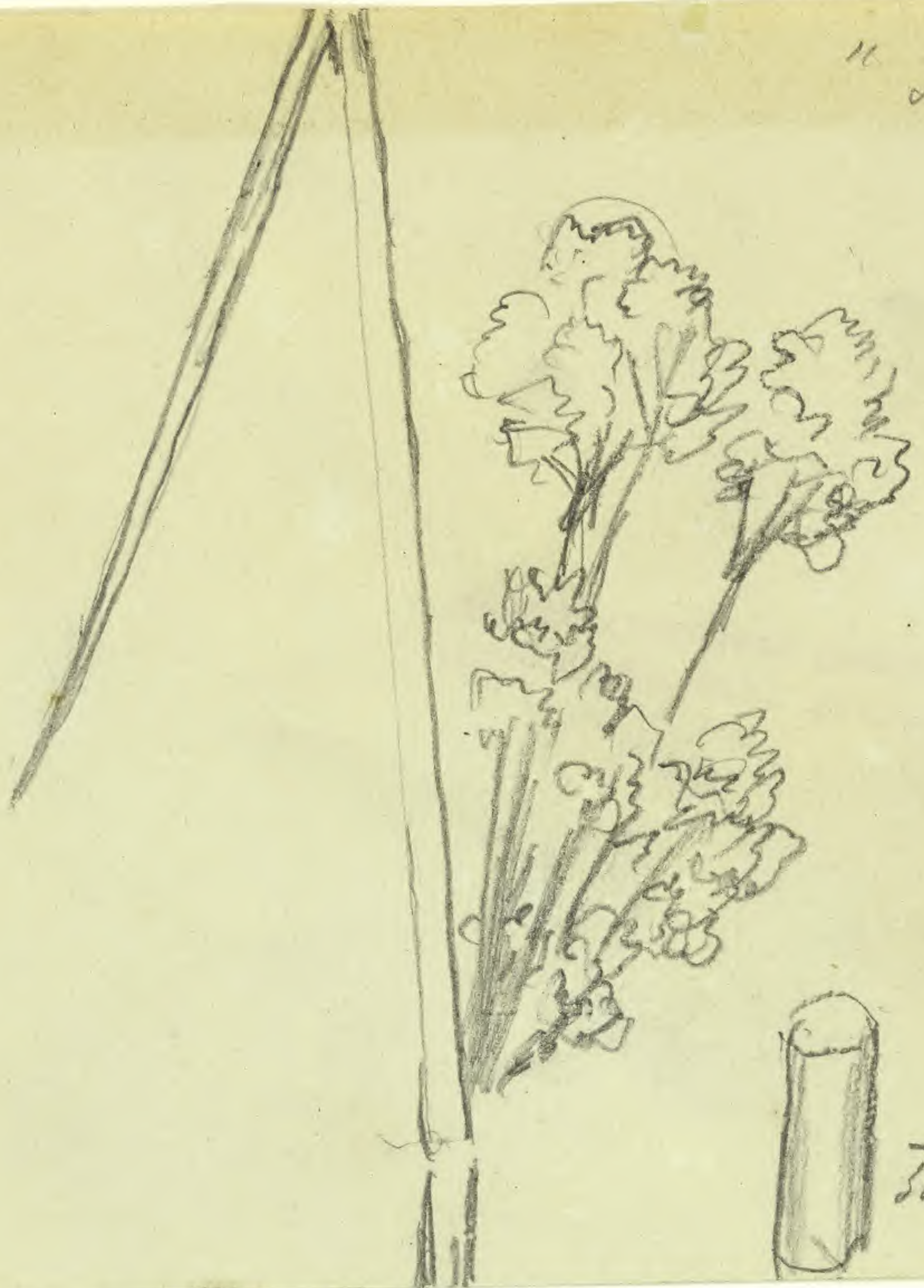


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"*J. vaginatus*"

Gunn, Tasman



stem

HERBARIUM OF THE UNIVERSITY OF CALIFORNIA  
JAN 17 1882  
CALIFORNIA BOTANICAL GARDEN  
HERBARIUM

APOT  
Mar

0  
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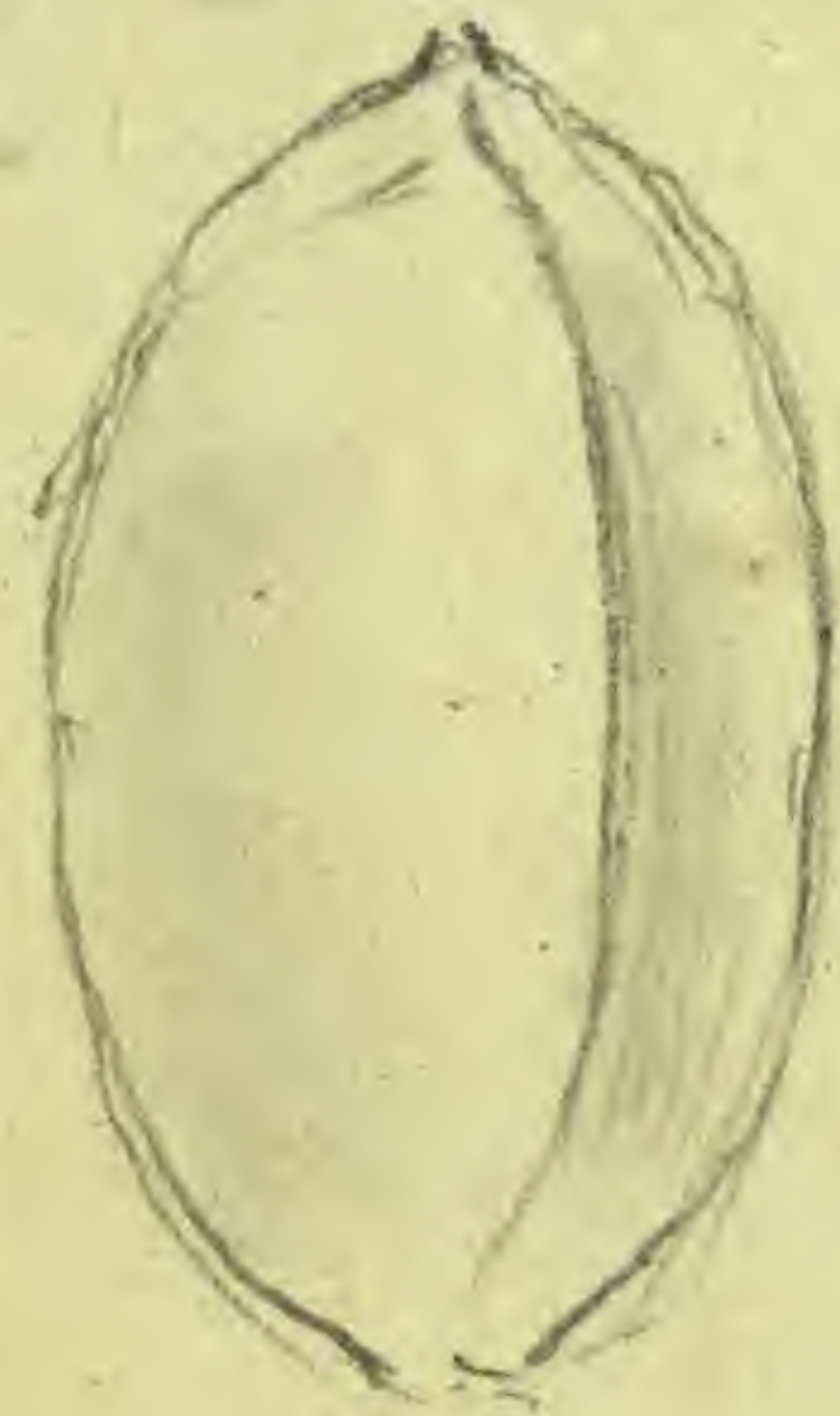


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*Juncus affinis* var *occidentalis* Jan 9 1866  
2. Mission Dolores, Bolander 1865

*J. procerus* P. Meyer?  
*J. parviflorus* — *affinis* ??



subacuta

sepalis et capsula ovata aciculosis  
externis lanceolatis acuminatis,  
internis obtusis mucronatis

caulis striatus, perianth vagina perianthae, (aristata)  
(longe mucronata)



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*Democarpus affinis* var

Jan 14 1866

Washington Territ.

Dr J. G. Cooper

1854

Ho Jory



sepala exteriora acuminata aristata fusca  
interiora fusca, medio viridia,  
obtusiuscula mucronata.

on account of the obtuse inner sepals to my process?



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2343 Calif. State  
Survey

Brewer mis. 1866

Lower

Swamps, San Francisco

Delaware Bay

Feb 27 1866



unripe  
Capsule  
ovate,  
acute  
not angled



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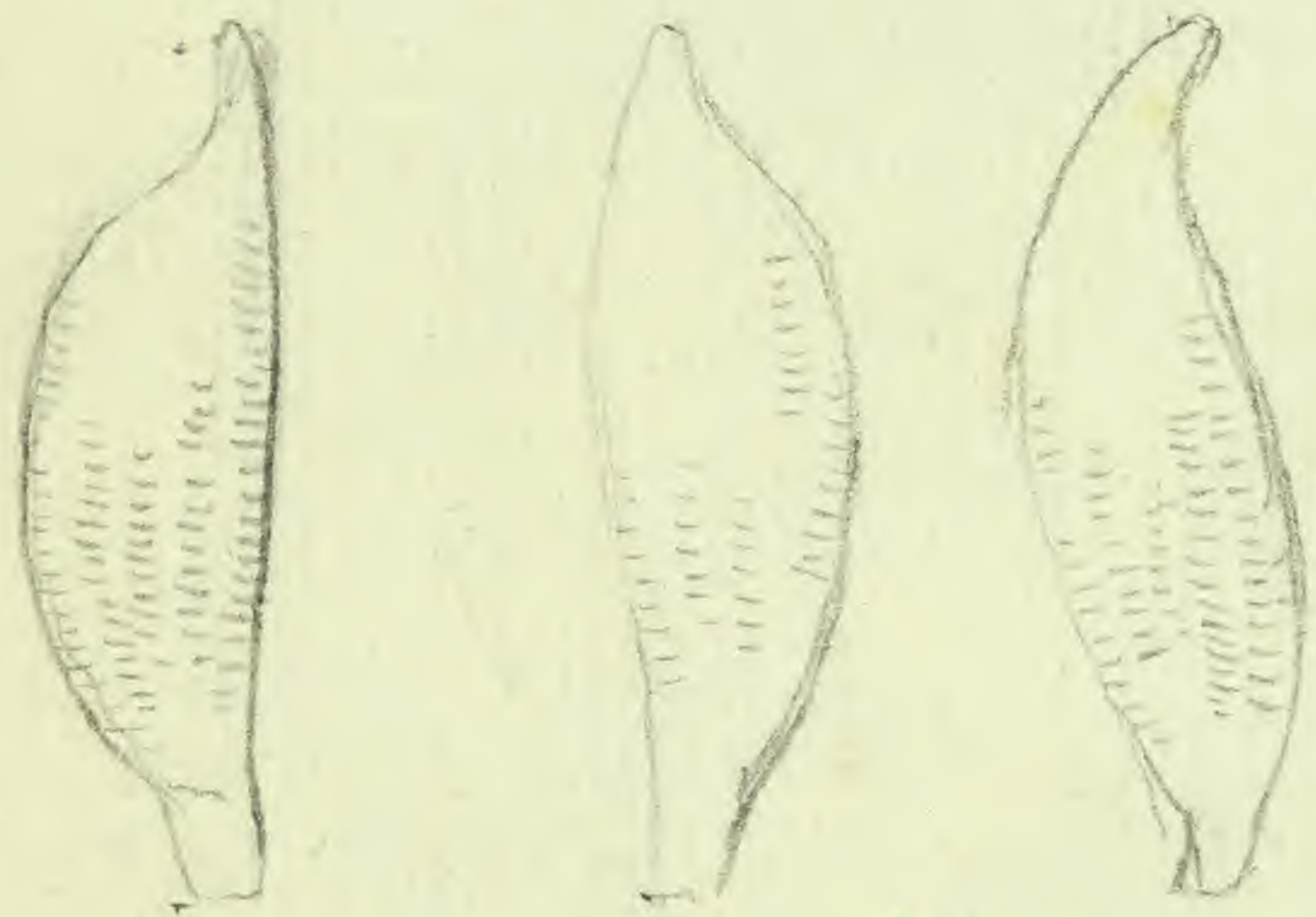


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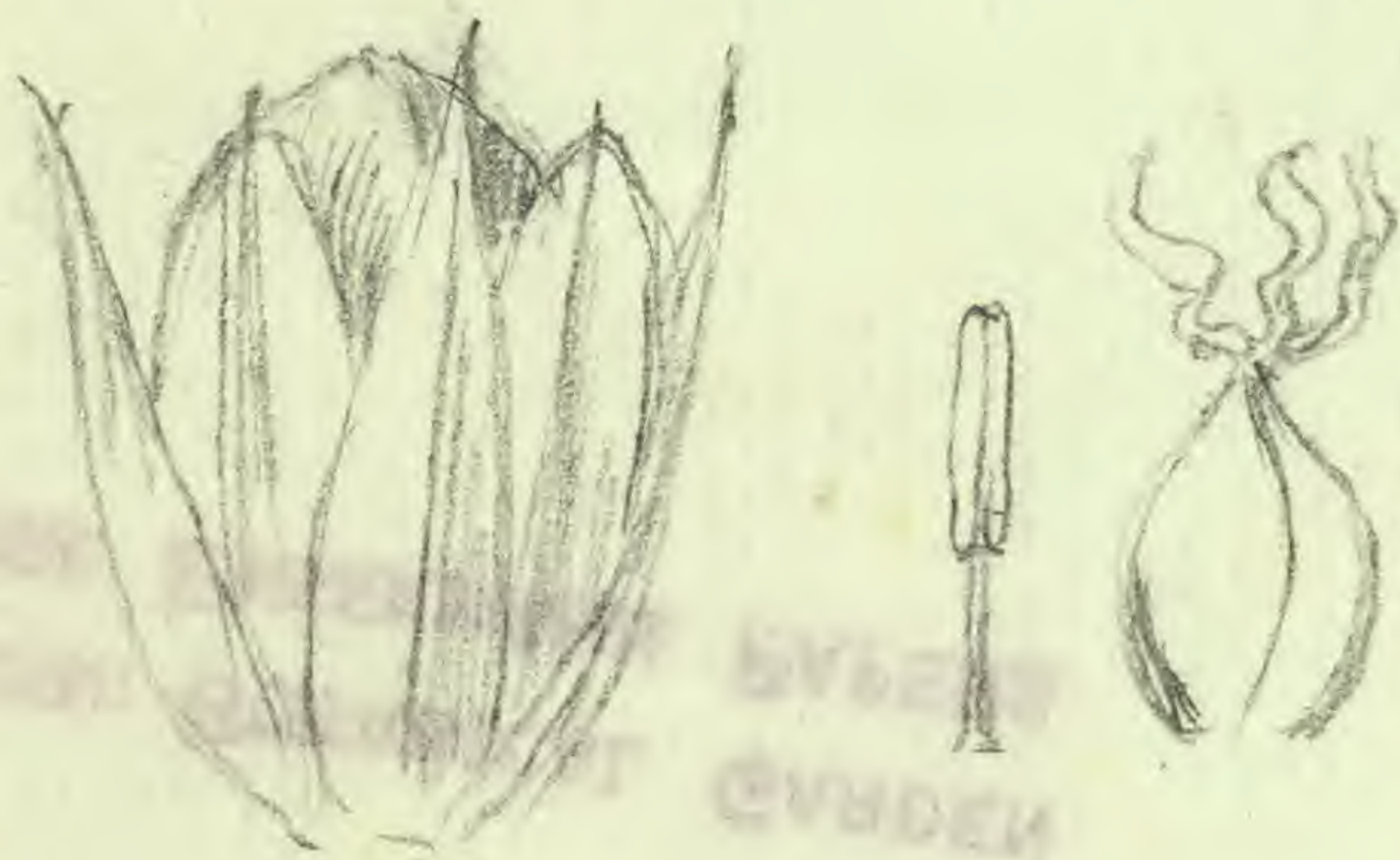


*Juncus procerus* Kunz      March 18 1866  
 Conceptum Du Chili, D'Urville Dec. 1825      ex Herb Kunth 1866

Kunth remarks: stam 3 and 4  
 = Herb



seed very unripe, still  
 distinctly cross striated.



sepala interiora  
 breviora obtusa mucronata  
 saepe



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HERBARIUM



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Nov 16 1865

*Juncus compressus* Meyer in

Chili, Chamisso,  
- Hb. Kunth.

M. Chamisso, *Linnaea* III, 368

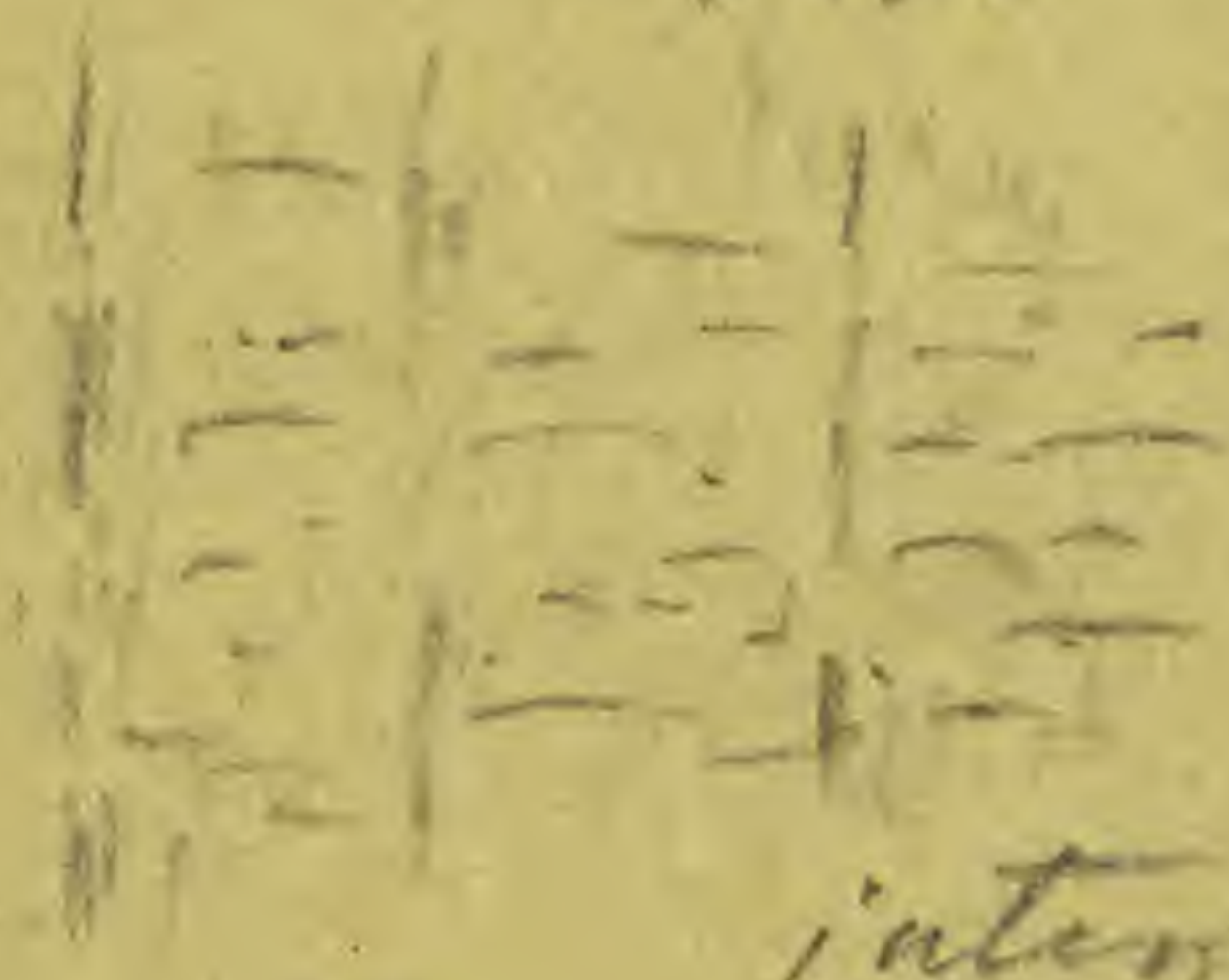
"potius ad *J. Ballianus*" Kunth *Enum.* III 317 note

"*Symplocarum* [Aligum?] stalk with crowded stems,  
like *J. vulgaris* - not long creeping like *Ballianus*  
A Braun in litt.



striation very  
faint - scarcely  
any

Surface of seed  
x 150



x 150

superior dorso fusca  
inferior viridi striata  
exterior minus viridia



x 60

ripe capsule  
full grown?  
hard to pergamatoro  
with 3 full grown seeds



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"*Juncus compressus*" fide E. Meyer Linnaea

III 368

Chili: Chamisso, is leafless, certainly  
different from *Compressus* W.D.K.; looks like  
*J. Ballianus*, but has not a long, creeping  
rhizome, but a short stout ("gyriferus")  
"sympodium"

A. Brown - Coll. Oct. 25  
1865



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**DRUGGIST,**  
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*J. pictus* Philippi in *Linnaea* 33  
(1864) p. 268

is (fide Buchenau) same as my

*J. Balticus*

forma *Parifida*.

= *J. Lescurii* Bd.

Philipp. M. Chit. No. 738.

I have the same from E. Durand.

flowers fewer and larger than *Lescurii*



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**APOTHECARY**

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*Juncus Bolanderianus*

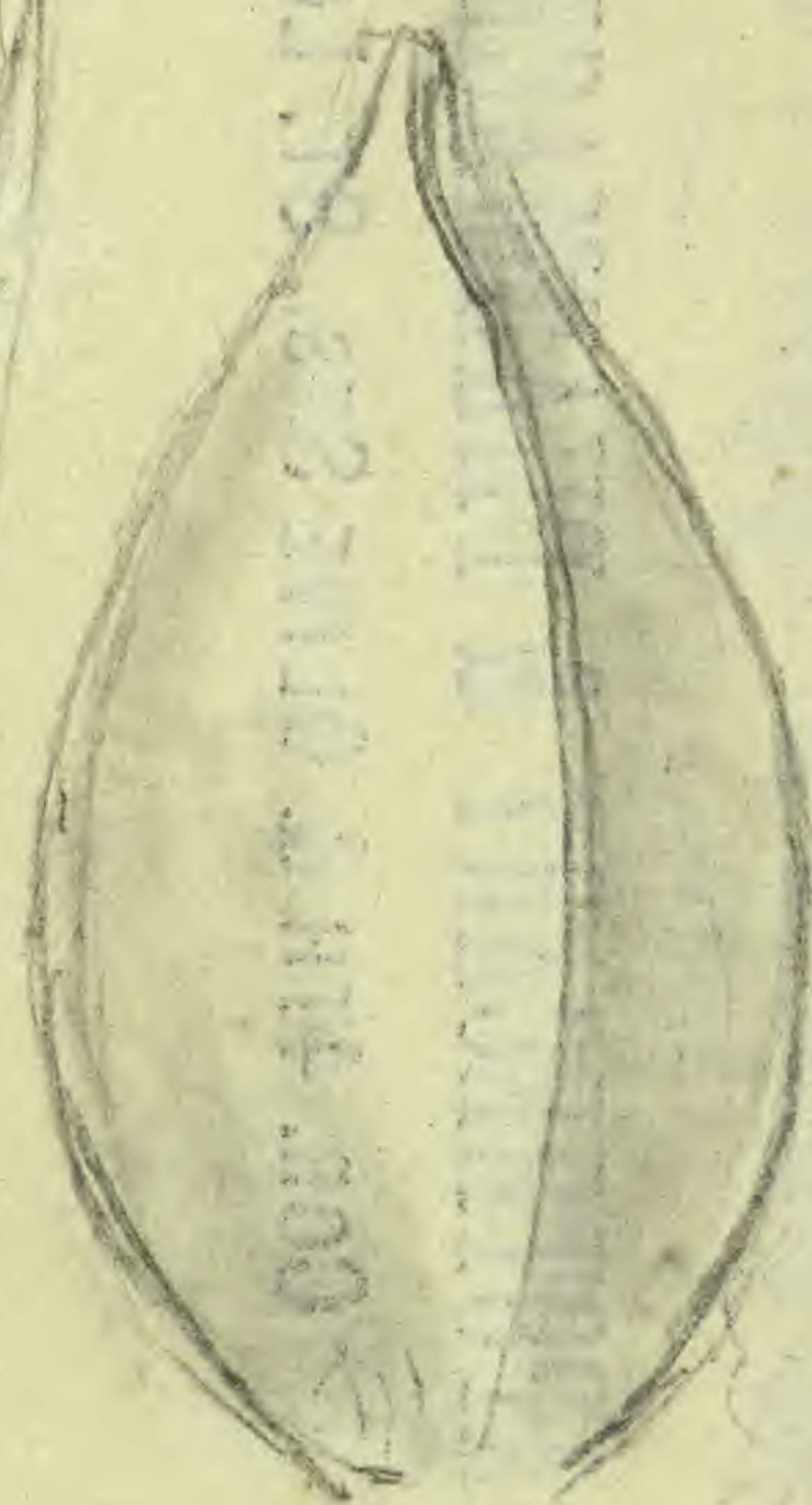
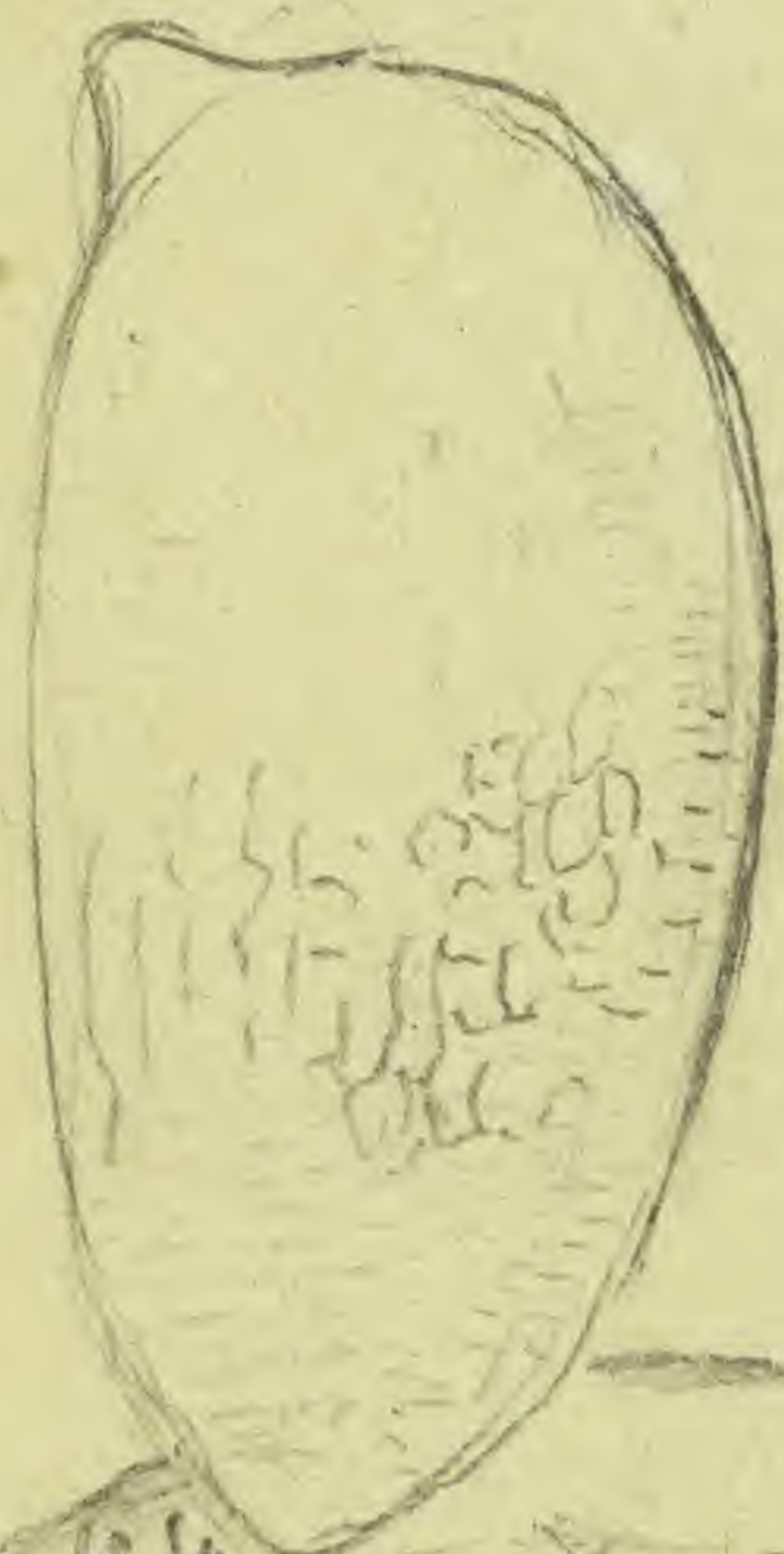
Jan 11 1865

1. Mission Goleros,

Bolander mi 1865

too near *Heimerl*

seed not quite ripe x60



Seed of hollow stem x 10.

sepals equal, lanceolate  
ext. acuminate  
int. obtusis-acute  
omni medio herbaceo  
latere castane, margini  
membranaceo.



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