



MISSOURI BOTANICAL GARDEN  
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GEORGE ENGELMANN  
BOTANICAL NOTEBOOKS

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7

5. *D. filiformis*

*Pyrenurus  
aphyllus  
hexandrus*

Year.	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1861...	32.2	40.4	44.8	58.1	64.1	76.9	77.5	78.6	69.1	57.9	46.0	39.7	57.1°F.
1862...	28.9	30.2	43.2	55.0	69.7	75.1	81.2	80.7	72.1	57.3	42.6	41.3	56.4°F.

RELATIVE HUMIDITY.

Year.	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of 6, 9, 12, 3, 6 and 9, from morning till night, based upon daily observations at these hours through the years 1861 and 1862, at St. Louis, Mo.

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.
1861 .....	8.6	10.0	9.2	7.9	8.7	6.9
1862 .....	8.9	10.0	9.1	7.3	8.1	6.8

TEMPERATURE.

1861 .....	48.9° F...	54.9	61.6	63.6	59.3	54.3
1862 .....	48.9	55.0	60.9	62.3	58.0	53.6

RELATIVE HUMIDITY.

1861 .....	86.4	71.3	60.3	57.2	65.1	77.3
1862 .....	85.3	70.6	60.0	57.5	67.6	78.0

168-6



0 1 2 3 4 5 6 7 8 9 10  
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8296



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MISSOURI  
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Juncus filiformis

W. Philad.

Gray Engelm.

English Run, Hudson Co

Hook & Greville

Cascade Mts

Lyall 1859

Fork Caloville to Rock Mts

Lyall 1861

White Mountains

Prickering

Gray 1842

Vokes

Little

Tuckerm.

Tuckerm.

Muttall

Oneida Lake N.Y.

Torrey

Gray

Richt.

Quabbin Mts

(?)



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ALEX LEITCH

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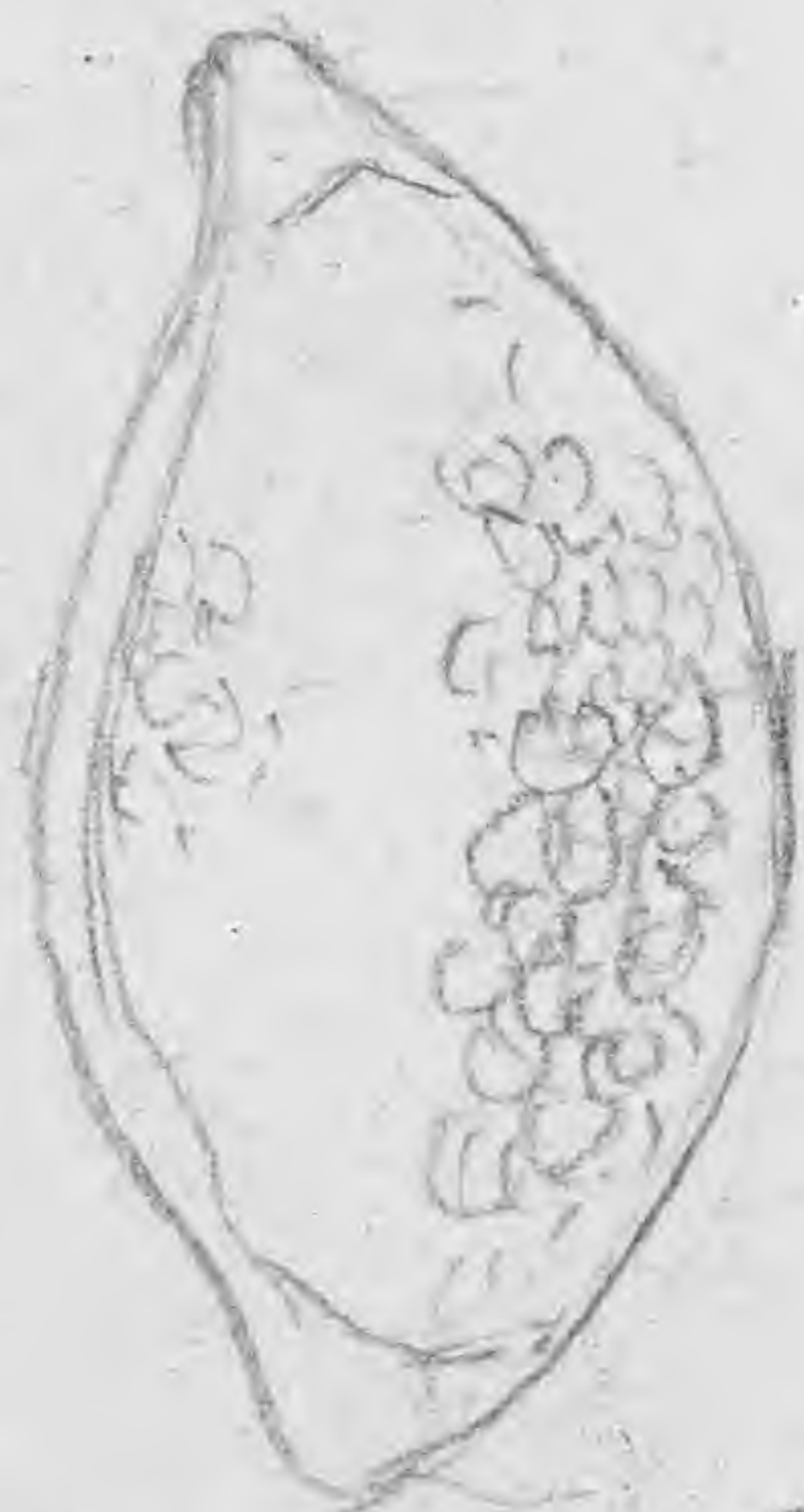


MISSOURI  
BOTANICAL  
GARDEN

Aug 13 1865

*J. filiformis*

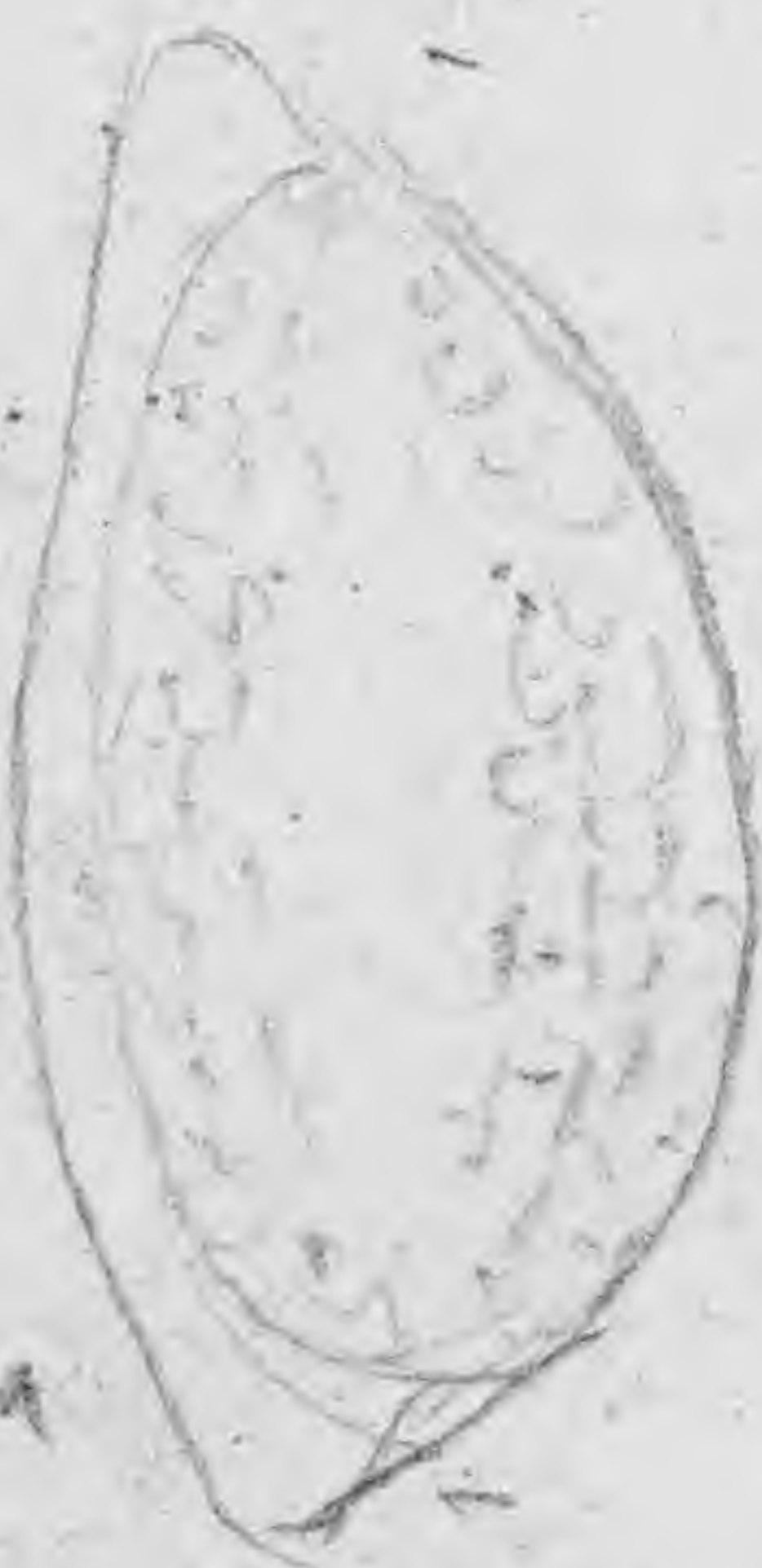
White Mountain Tucker



New York ex Hb. Richl  
sub nom *J. selenskyi*

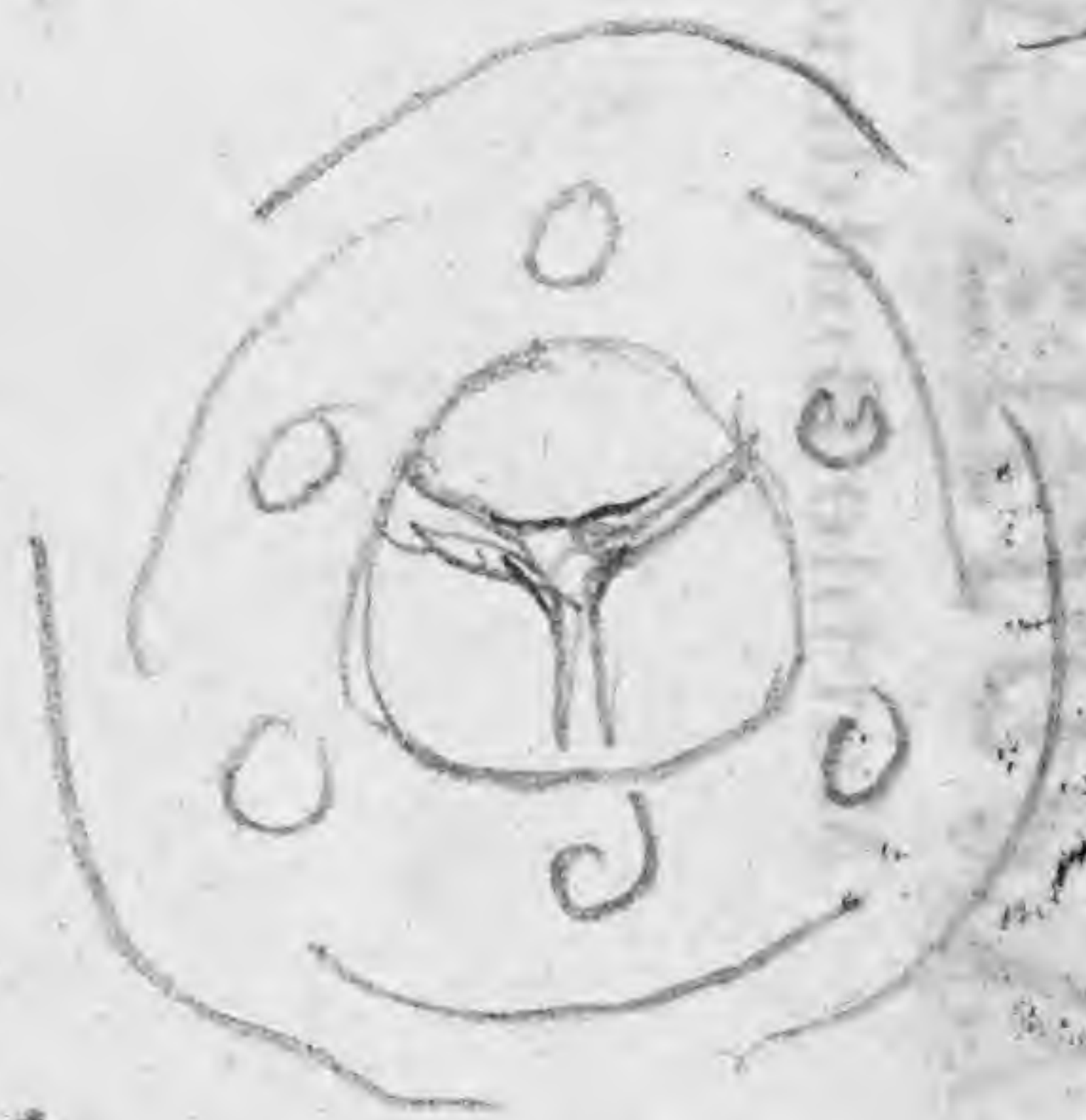


dissepimental & placental  
regular

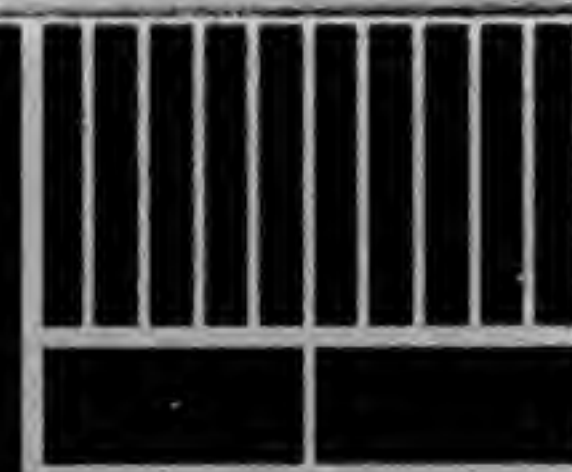


*testa laxa*

in all my European & Amer.  
sp. I find the inner sepals  
a little shorter than the outer



capsules as long or longer than sepals  
outer sepals acute, inner obtusish



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*D. filiformis*

Aug 30 1855

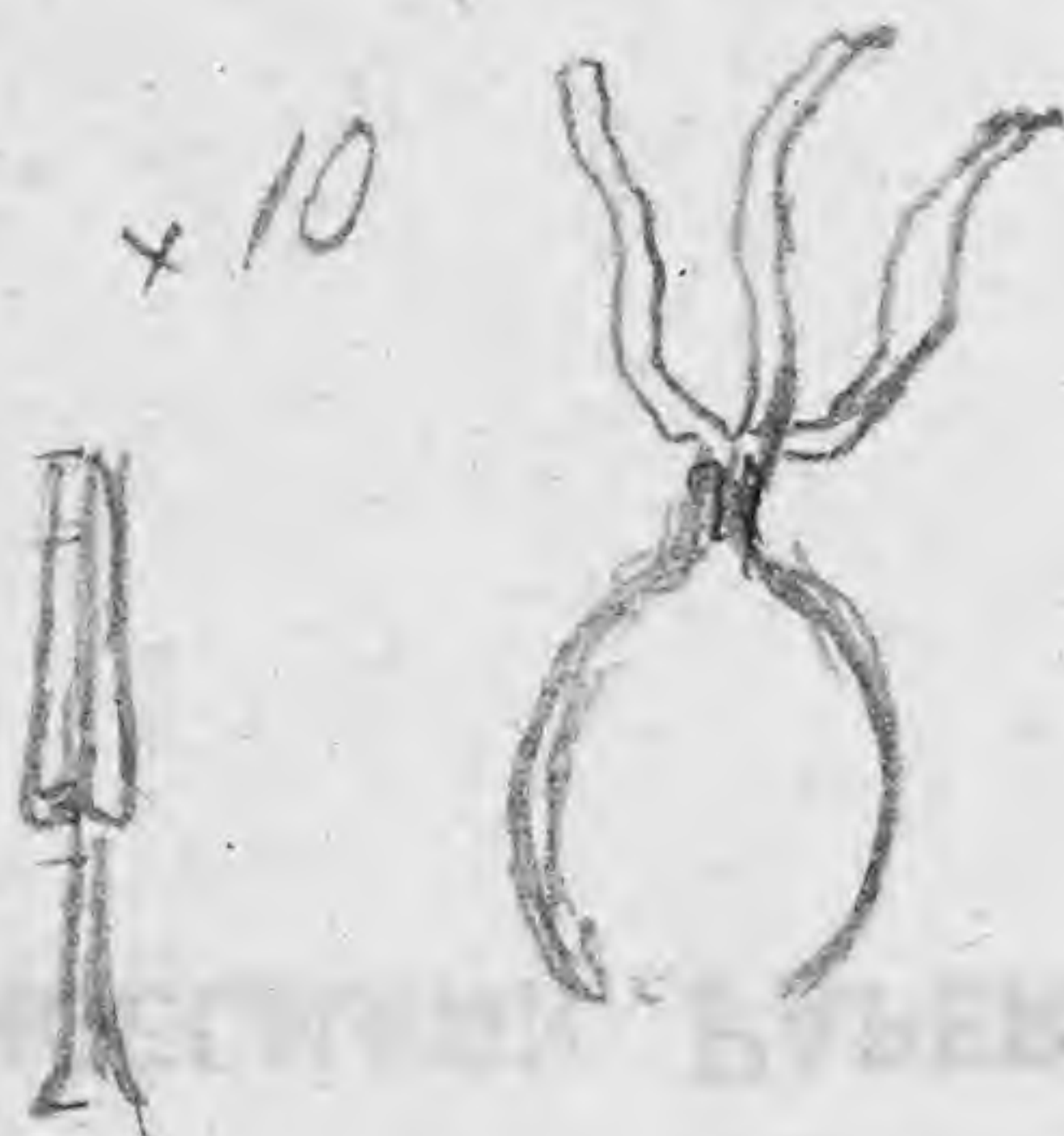
Main in Herb Hall

x60



testa large

x10



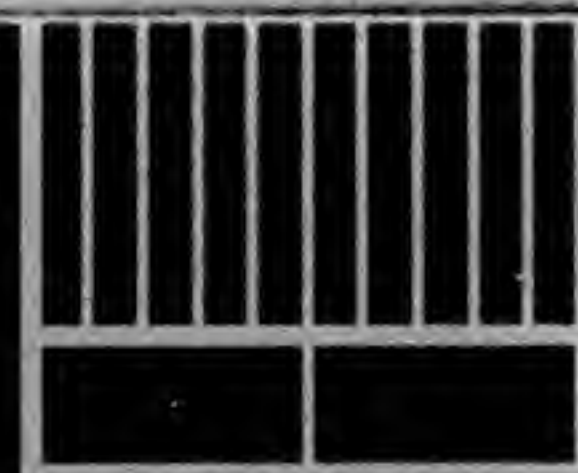
Capsula exsert.

*Shizoneura repens*

Another specimen from Maine has capsules as long as

calyx - compact inflorescence

A Canada specimen has loose infl. and all the sepals  
very acute



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cm

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**ALEX. LEITCH & CO.**  
**APOTHECARY AND CHEMIST.**  
Marble Building, cor. 4<sup>th</sup> and Olive Sts.,  
**ST. LOUIS, MO.**

1806

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" *Juncus fliformis* 15 May 1866  
Roem & Schult "

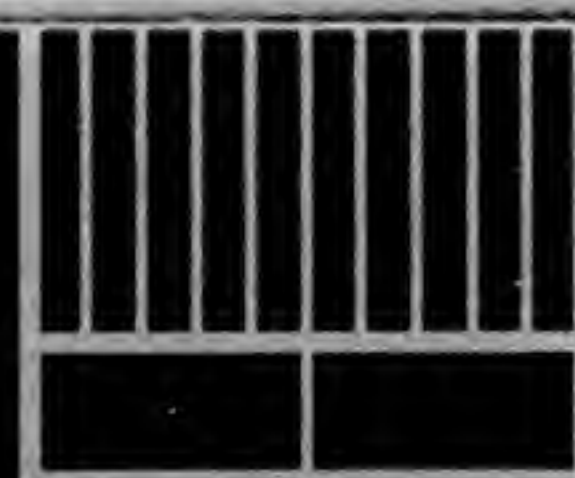
New Zealand

M. Raoul 1843

ex Hb. Mus Paris - Hb. Gray



very young seed



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cm

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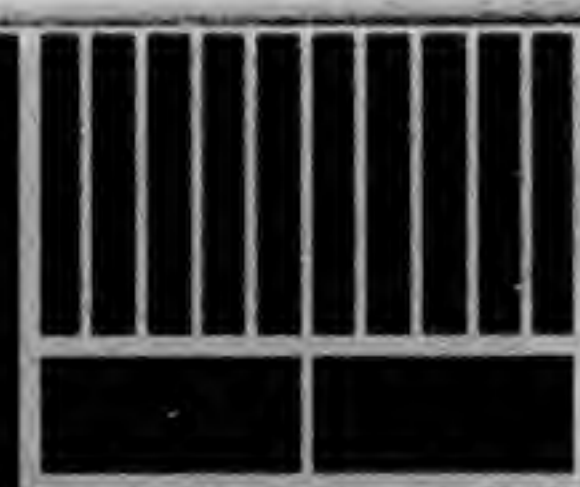
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*Juncus setaceus*

Aug 13 1865

Florida

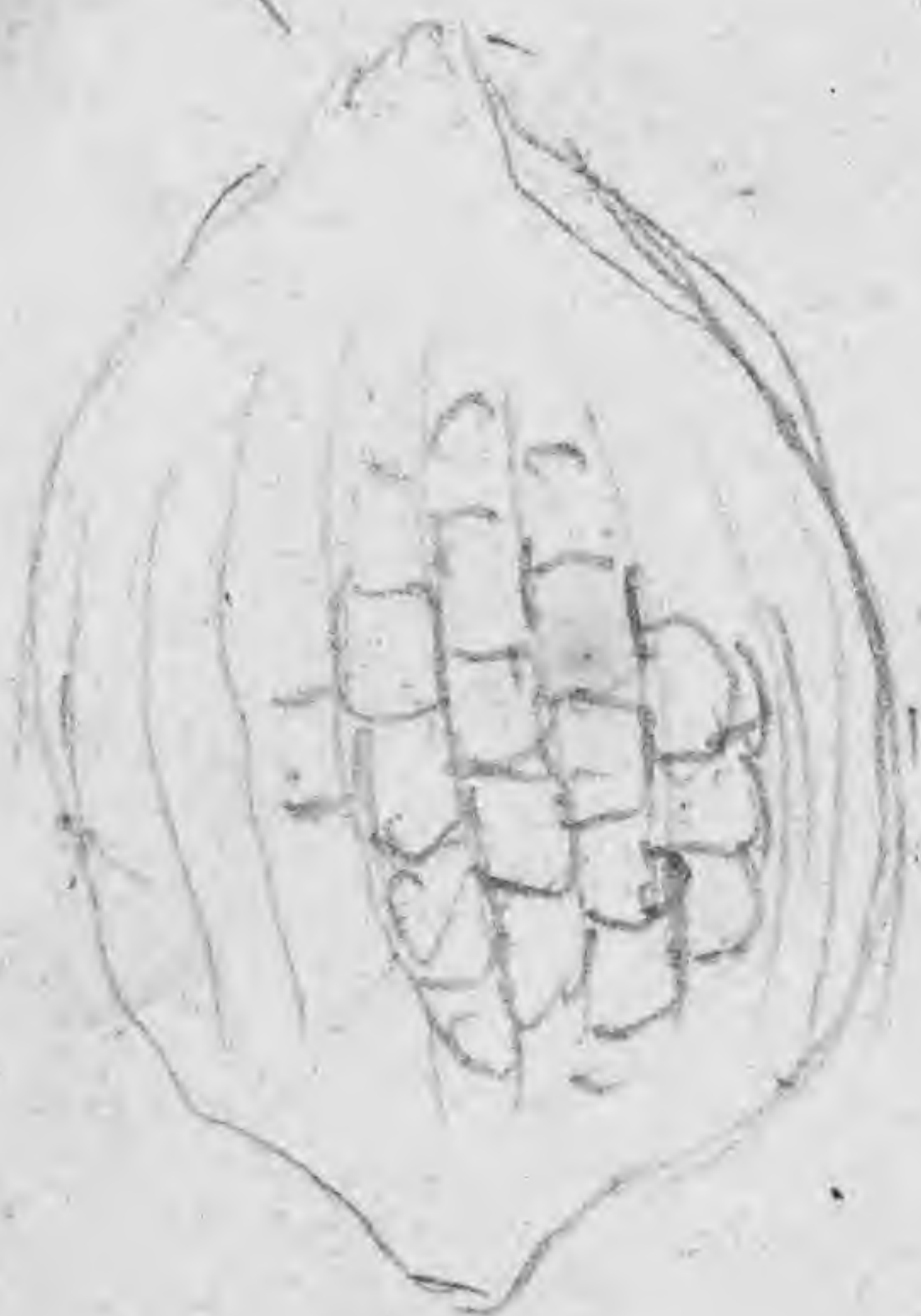
Chapman



x 10



x 60



seed not quite ripe  
(boiled)

HERBARIUM OF THE UNIVERSITY OF CALIFORNIA  
DIPLOMA OF ADMISSION



cut of leaf x 10

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ATLANTA, GEORGIA



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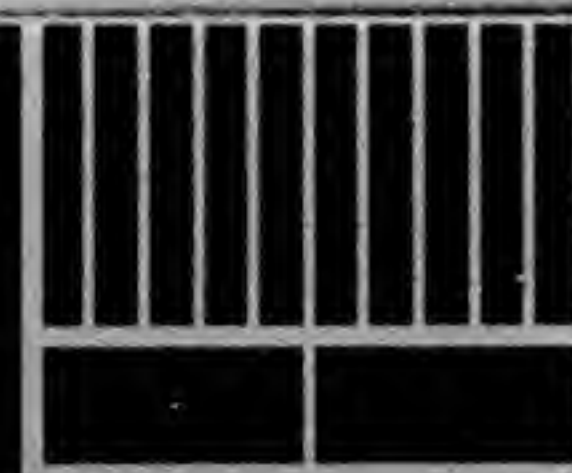
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*J. setaceus*

Jan 16 1866

var *contracta*

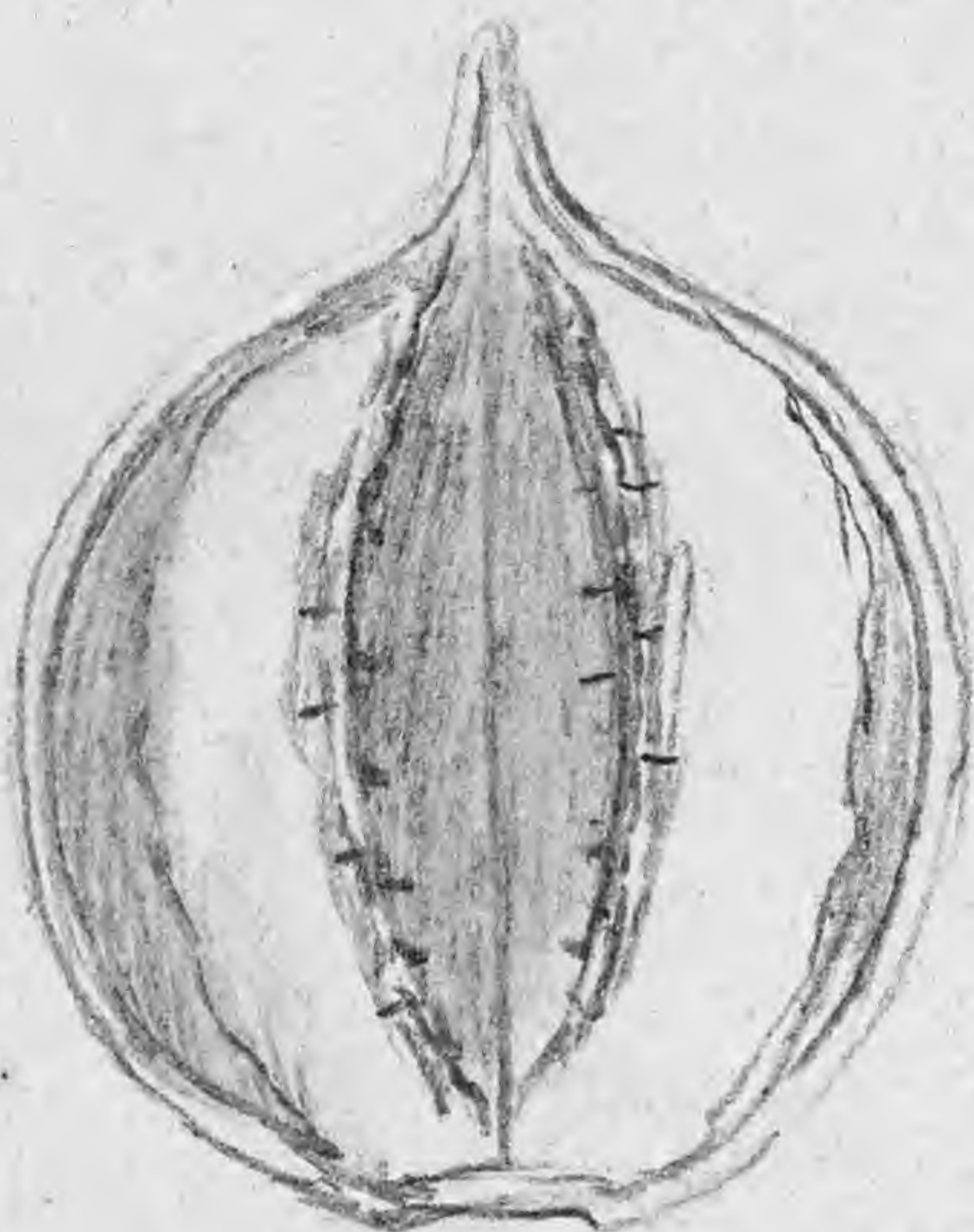
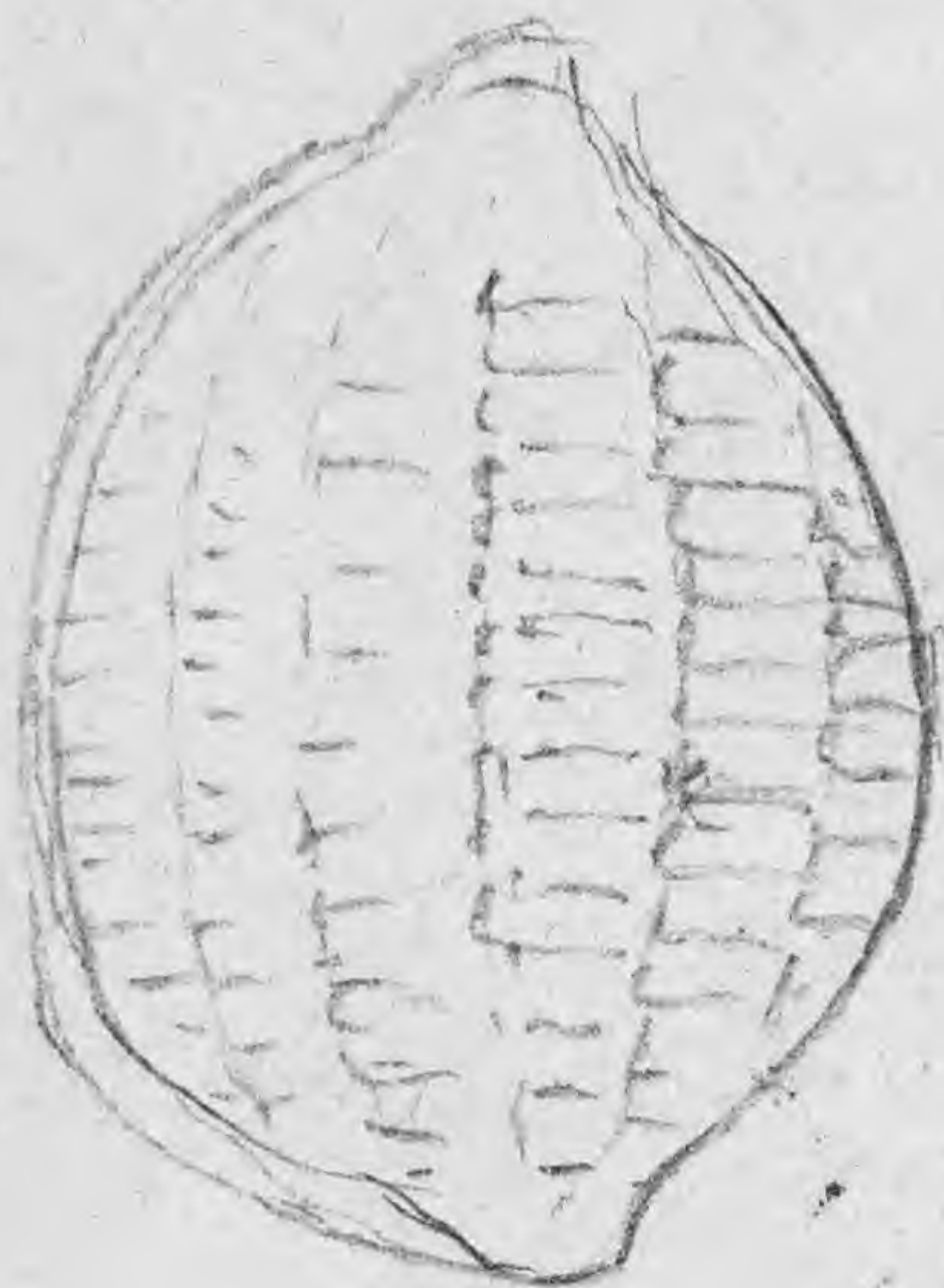
Lincoln Co

N. Carolina

Dr Hunter

C. ex Hb Gray

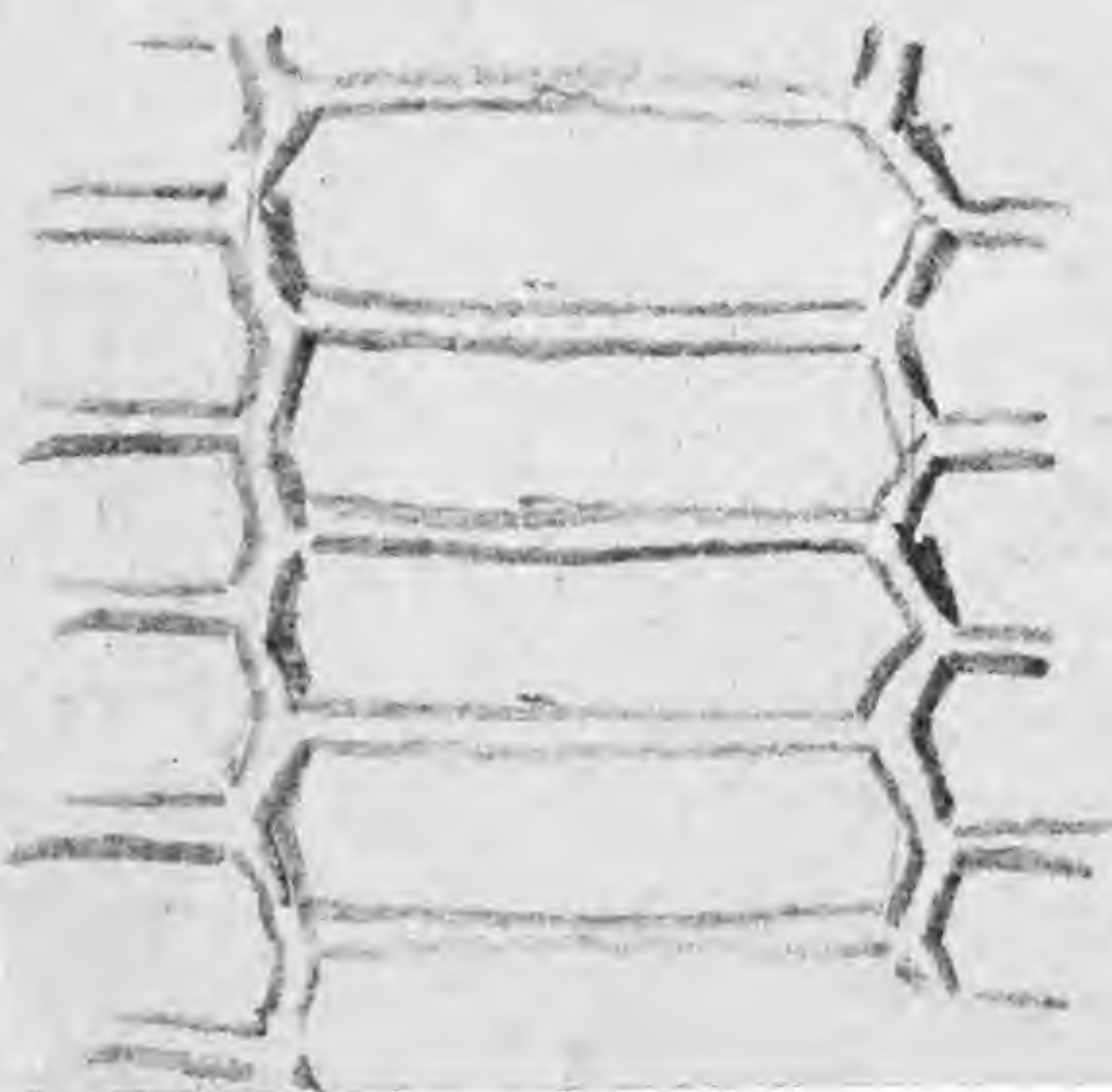
x 60



Inside of capsule  
2 dissepiments visible

ripe seed

at full maturity plantlets  
separating in the middle;  
at the same time, dissepiments  
separating from the valves.



x 150

seed 0.32 - 0.33 line long



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cm

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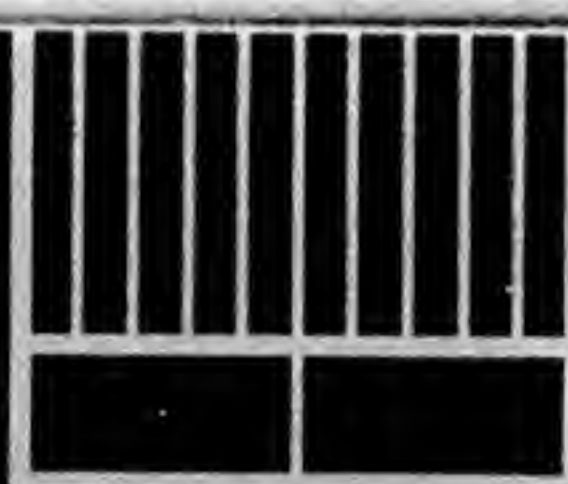
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cm

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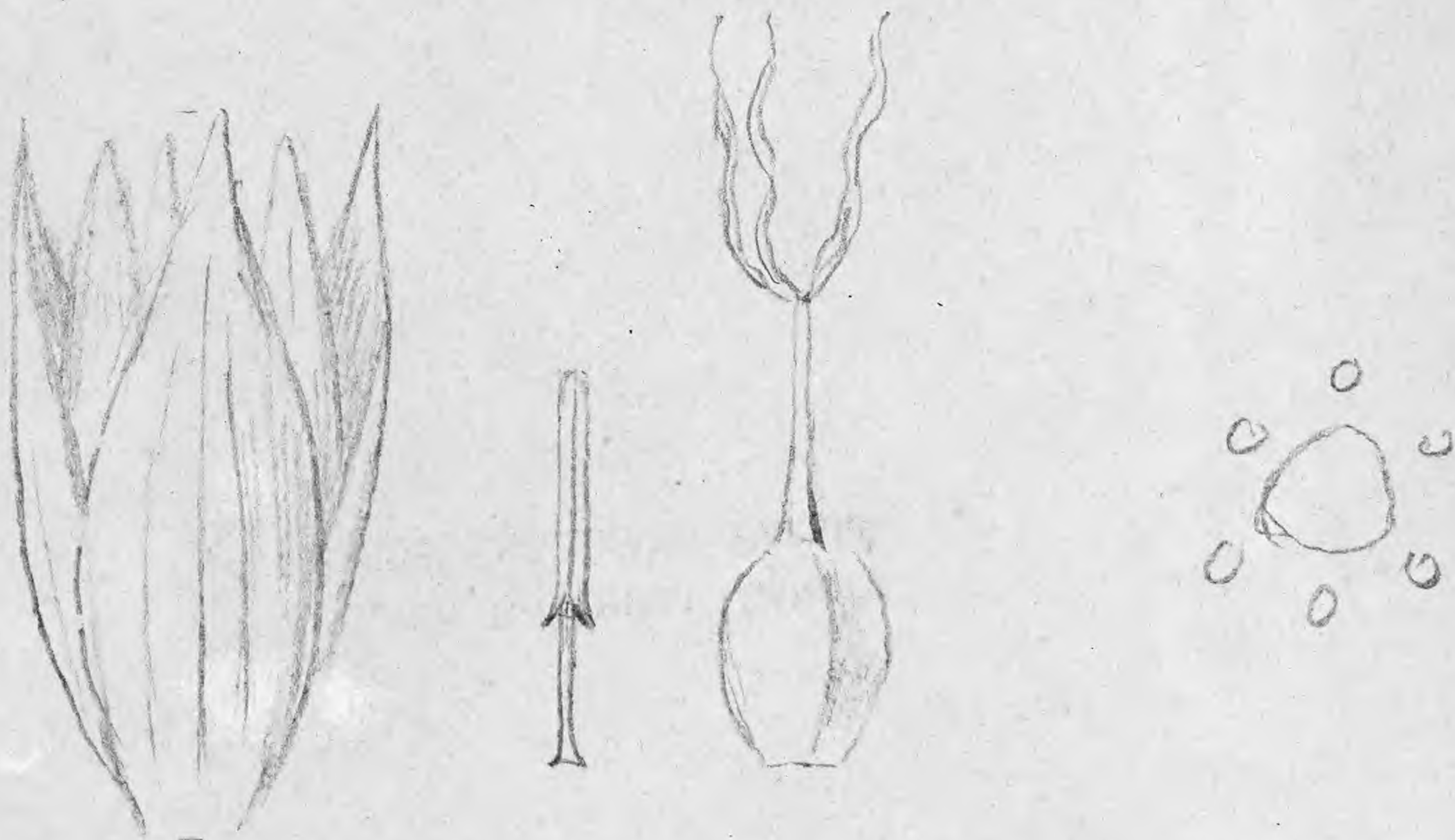
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*J. setaceus*

Jan 16 1866

Diamond, N Orleans

- Hb Gray



0

1

2

3

4

5

6

7

8

9

10

cm

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cm

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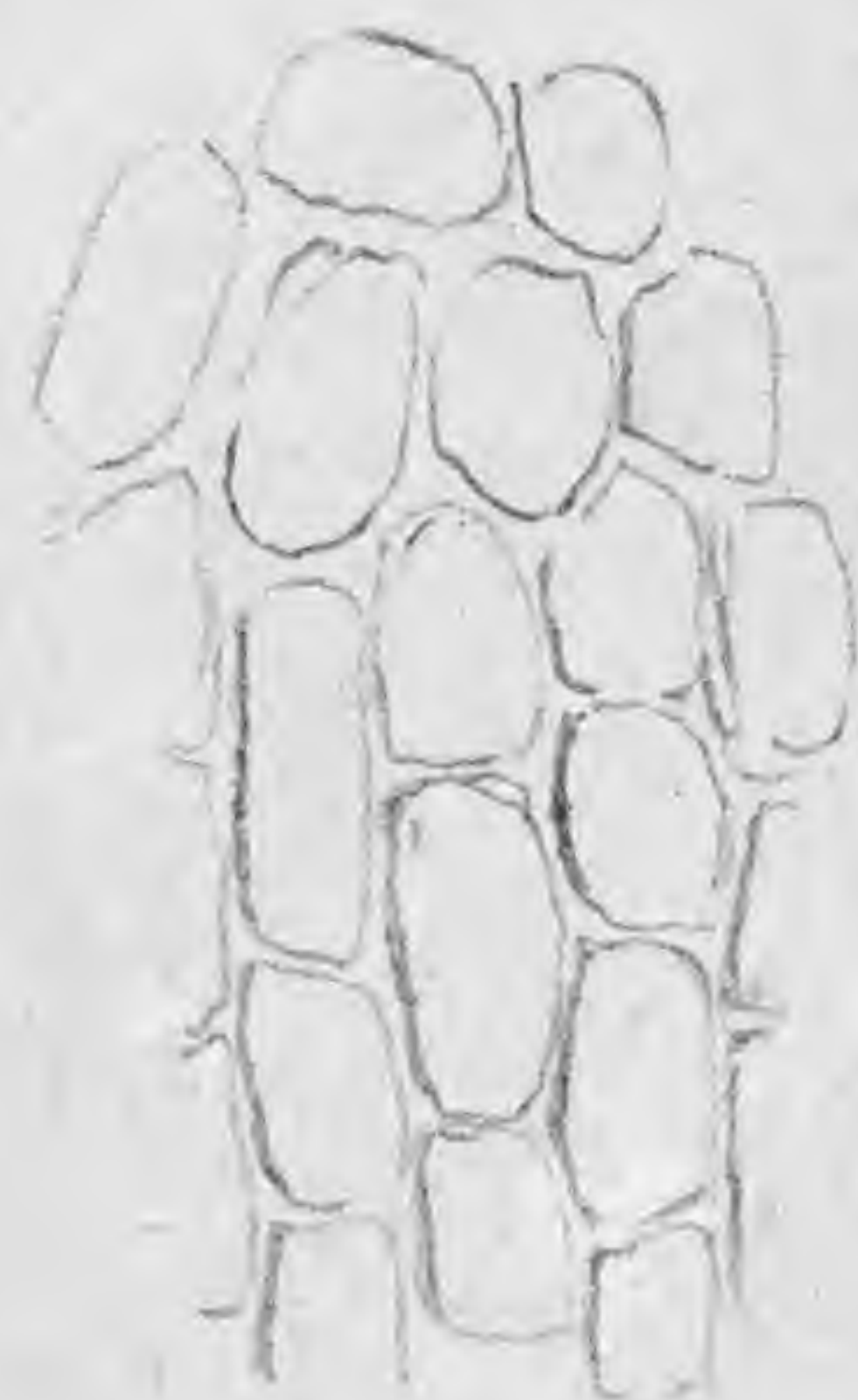


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*J. setarum*

March 29. 1866

Germany



x150



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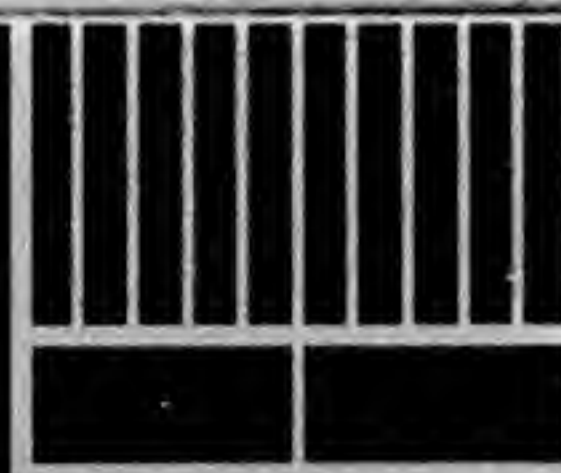
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cm

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Juncus setaceus Roskovius Monog. Juni.

Berlin 1801 pag 13

Tab. I fig 2.

Culmo nudo filiformi nutante, umbella latente.

Composita pauciflora, pedunculis multifloris, petalis

Hab in Pennsylvania

subulatis.

Culmus erectus teres apice subulato erecto vel nutante.

Umbella lateralis supra medium culmi e pedunculis 3-4  
erectis composita, uno uniflora, reliquis 3-8 floris

Calyx [ involucri ] trivalvis membranaceus

Petala 6 laciniata brunea apice subulata subaequa

Stamina 4 Antheris reliquis petalis duplo breviora <sup>alio.</sup> breviora

Capsula ?

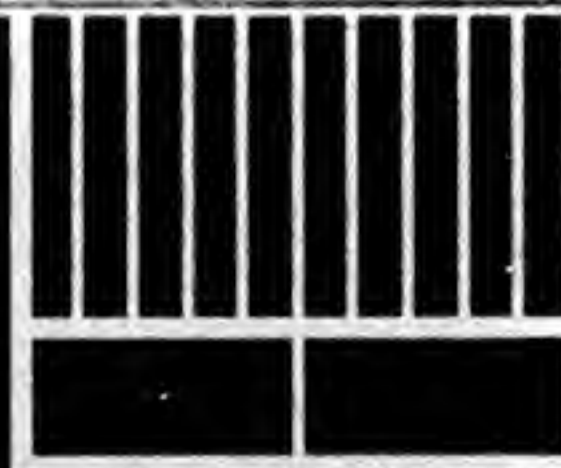
Affinis Juncus filiformi sed pedunculis ramosis

calyce trivalvi petalisque subulatis bruneis  
abunde distinctis.

Nothing said about leaves. - From Pennsylvania!

Where did he see the specimen? Herb Willdenow?

Meyer, J., Juncus p. 18 mentions the leaves - says: Antheris. Over



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cm

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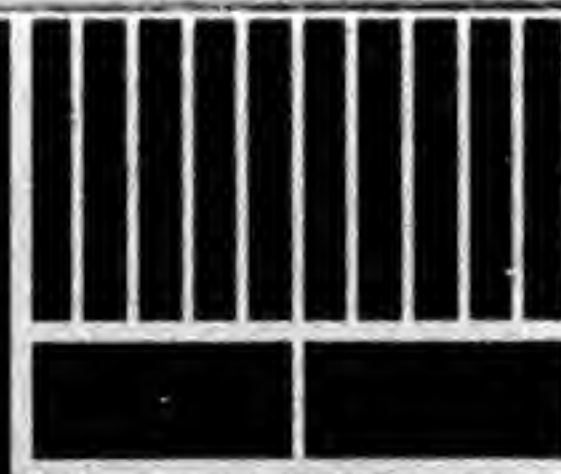
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neither Rankin nor Elliott  
# 406 says any thing about leaves  
Gray mentions it as *Persea*  
man

9087



0 1 2 3 4 5 6 7 8 9 10

cm

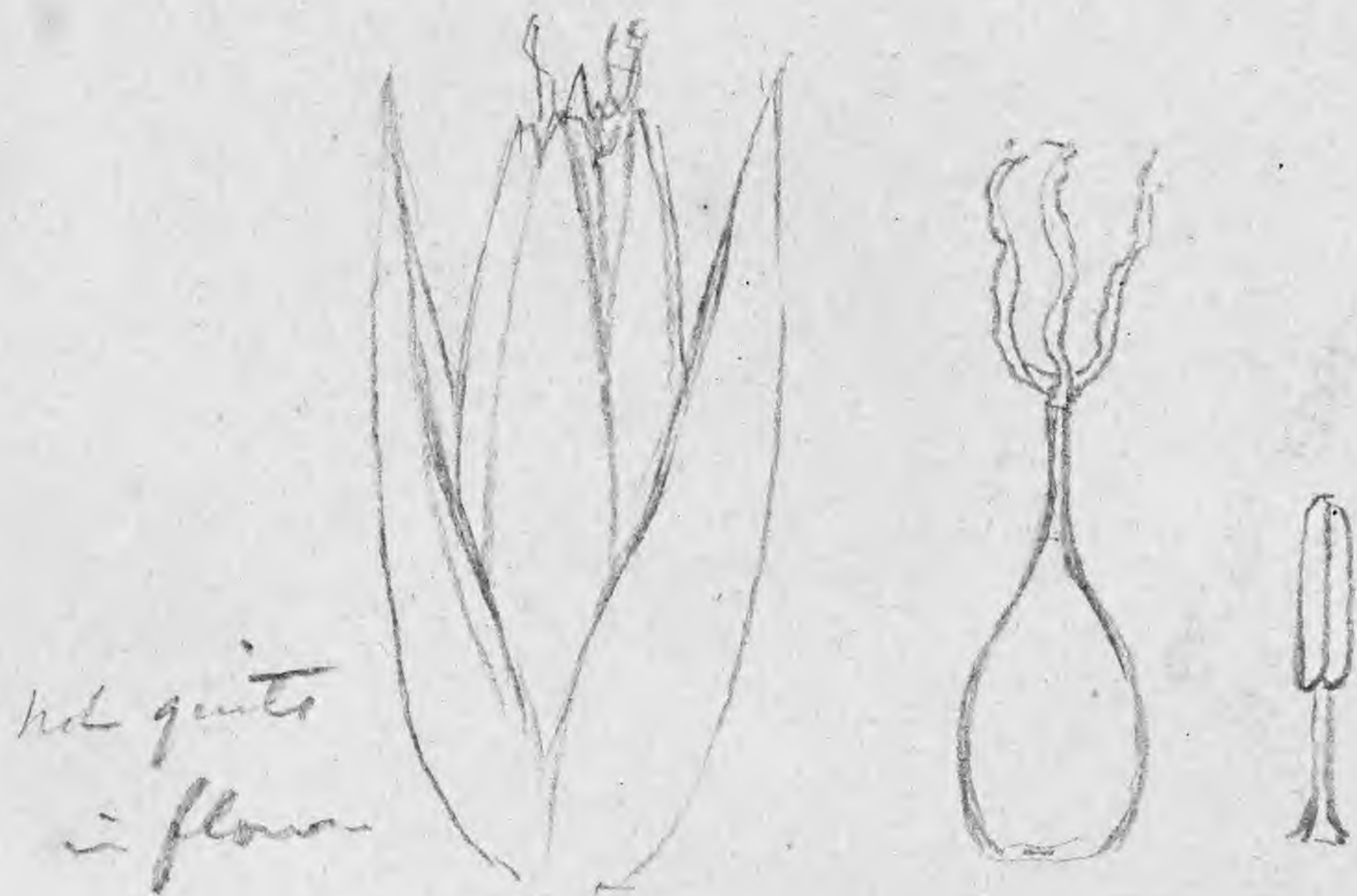
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*J. setaceus*

HC An Phil



sepals nerveless, not connate, rounded



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*J. pauciflorus* A Br

San Antonio & B. and

167-8

116

TRANS. OF THE ACAD. OF SCIENCE.

IV. Direction of Winds and number of Thunderstorms in '61 & '62.

1861.		E.	N.	N.E.	S.W.	N.W.	S.	N.W.	S.E.	Prevailing Winds.	Thunder- storms.
January.....	11	3	12	22	38	18	28	61	S.E.	.....	0
February.....	4	2	2	35	24	19	41	60	S.E.	.....	2
March.....	12	11	10	23	30	19	42	40	W. & S.E.	.....	3
April.....	16	10	9	26	21	35	34	26	S. & W.	.....	2
May.....	26	10	23	21	8	13	49	35	W. & S.E.	.....	5
June.....	12	21	22	20	25	26	8	41	S.E.	.....	7
July.....	3	31	14	21	26	46	15	29	S.	.....	3
August.....	18	24	58	17	11	18	3	37	N.E.	.....	5
September....	6	14	18	26	30	13	21	52	S.E. & N.W.	.....	3
October.....	12	9	5	21	30	33	30	46	S.E. & S.	.....	1
November....	7	15	8	22	27	20	36	44	S.E. & W.	.....	1
December....	9	19	9	25	23	33	17	51	S.E. & S.	.....	0
	136	169	190	279	293	293	324	522	S.E.	.....	32

1862.		E.	S.W.	N.	N.E.	W.	S.	N.W.	S.E.	Prevailing Winds.	Th. st's.
Jan.....	19	6	19	23	29	3	38	51	S.E.	.....	1
Feb.....	14	9	18	16	22	7	39	43	S.E. & N.W.	.....	0
March...	9	14	3	15	59	10	34	43	W., S.E. & N.W.	.....	4
April.....	12	13	18	31	18	11	34	47	S.E., N.W. & N.E.	.....	6
May.....	12	18	14	38	18	30	14	44	S.E. & N.E.	.....	5
June.....	3	29	24	16	8	36	26	23	S., S.W., N.W., N. & S.E.	.....	6
July.....	5	25	17	7	2	24	31	77	S.E.	.....	10



0 1 2 3 4 5 6 7 8 9 10 cm

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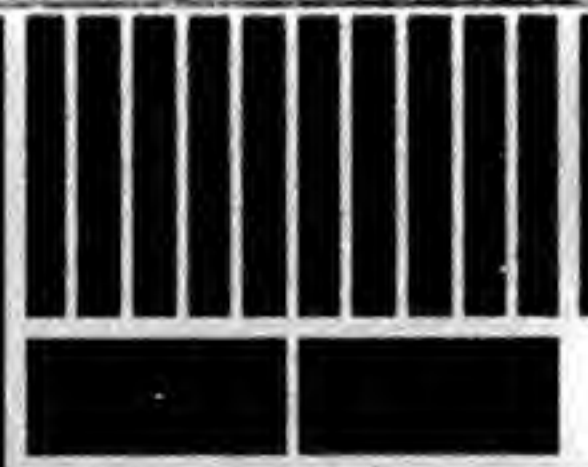


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*J. pauciflorus* A. Br.

March 13 1866

Tasmania. Gunn <sup>in</sup> Hb Gray

usual

rare



sep. interna aequilonga  
seu vix breviora, minus ante  
exterior ad basin 3 nervis

per septe lenissima  
(C. p. p. p.)

all specimens are Candors  
only Siebert's is 3 and

Archer & Gunn for Tasmania  
Stewart, Parry for Tasmania  
Muller, Apollo Bay



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