



MISSOURI BOTANICAL GARDEN
PETER H. RAVEN LIBRARY



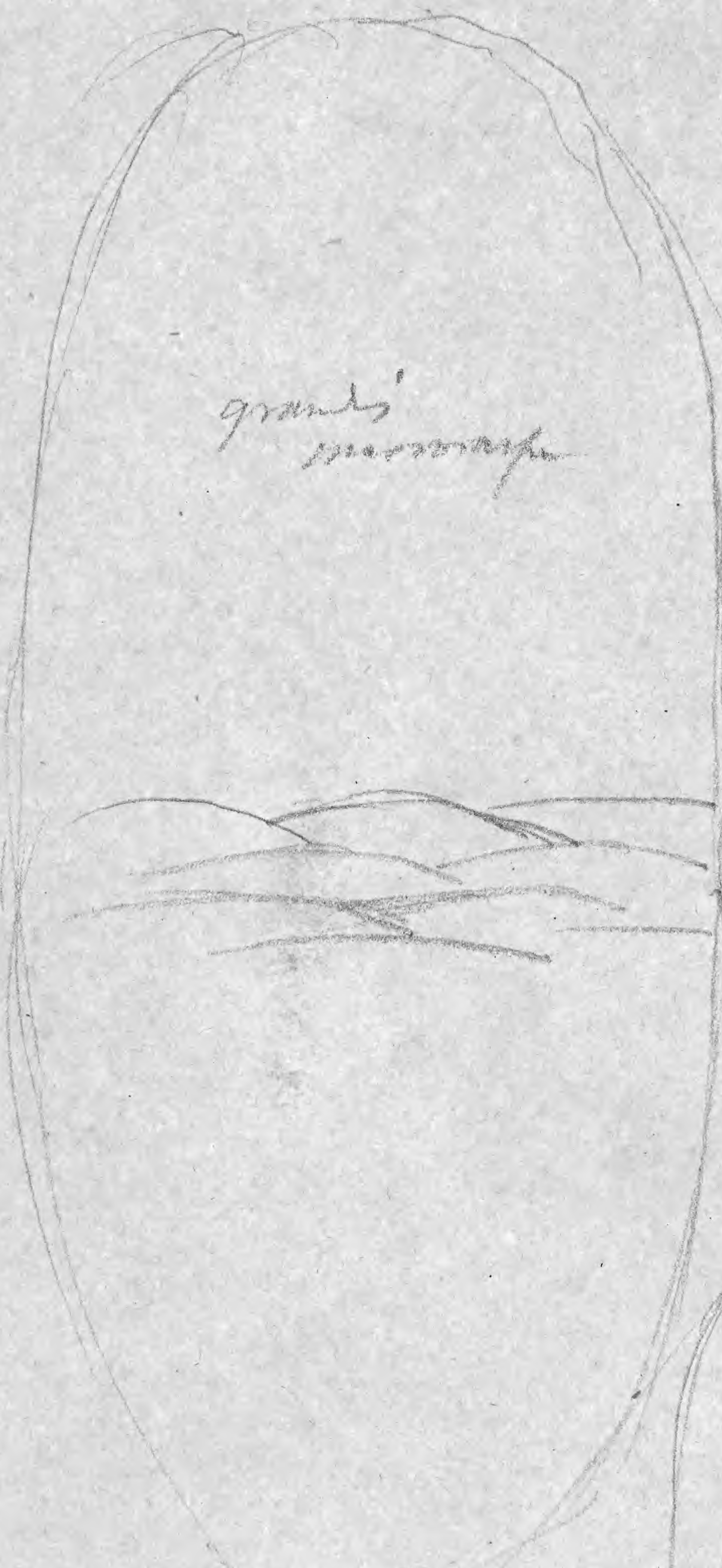
GEORGE ENGELMANN
BOTANICAL NOTEBOOKS

Pagination Note:

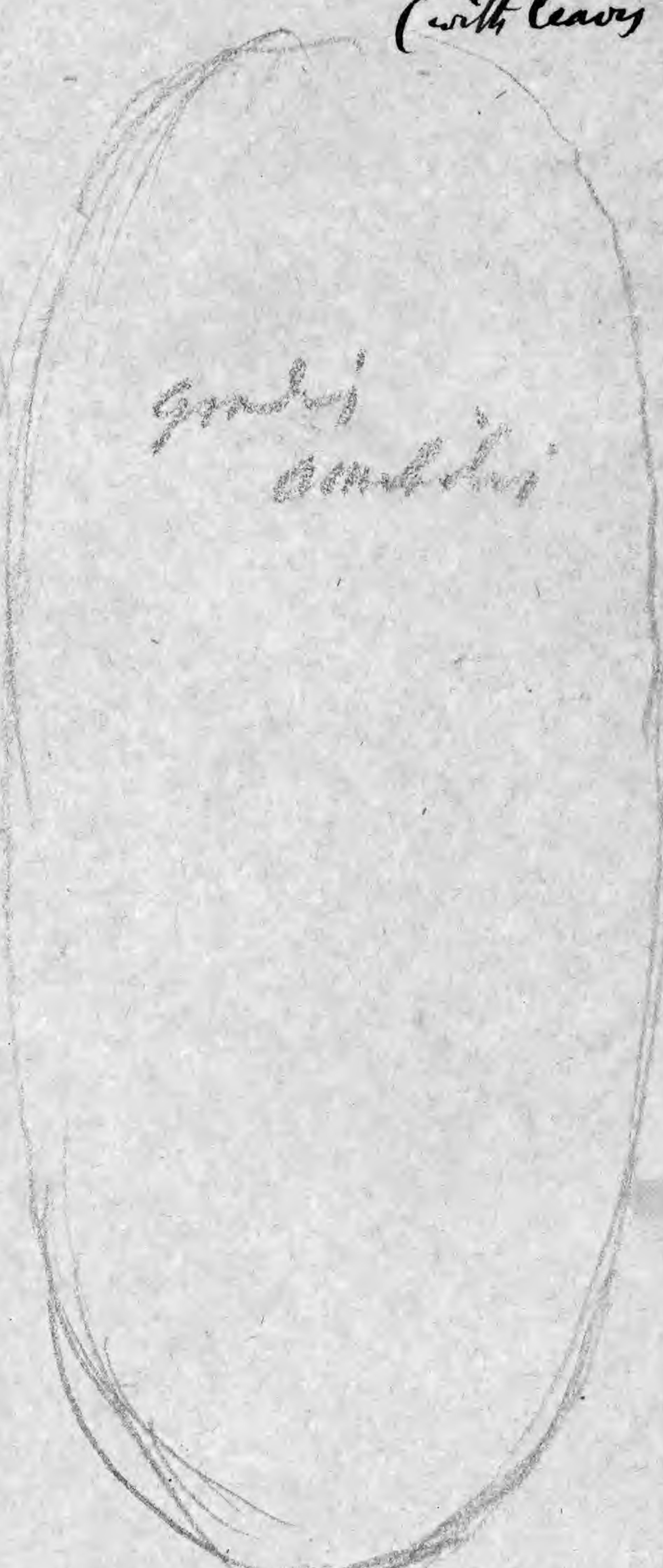
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Kew Museum Sept 1869.

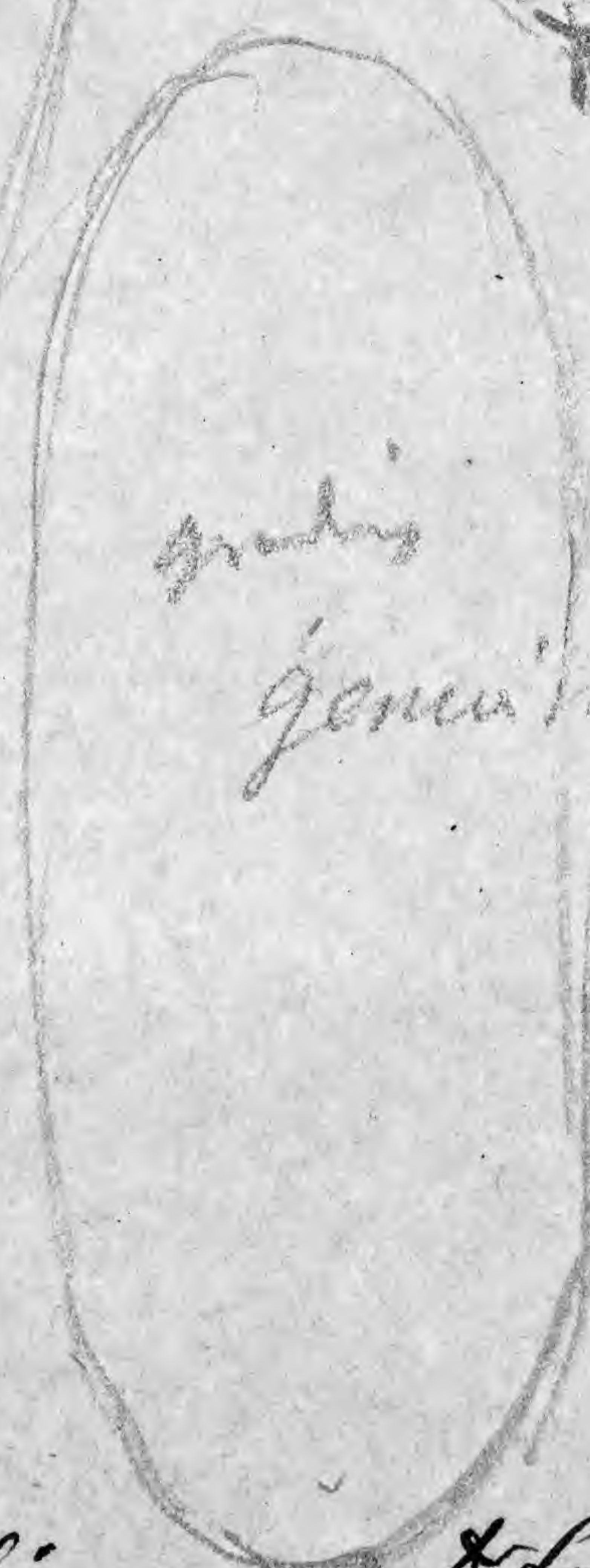
A. ambilis?
A. Colville Cyp.
(with leaves)



grandis
massoniana



grandis
ambilis



grandis
genuina

Abies ambilis
Sierra Nevada, Cal.
from Mr. Veitch

(This, from the notes given by Murray 1863
must be a cone of *Abies* *gondola*
(Feb 1872))

Scale by cones
from 3 1/2 - 5 inches long
(smaller than this)

leaves very
sharp

A. ambilis

D. Lyell, Aug 1862



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



MISSOURI
BOTANICAL
GARDEN

12806

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



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

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Kew Museum Sept 1864



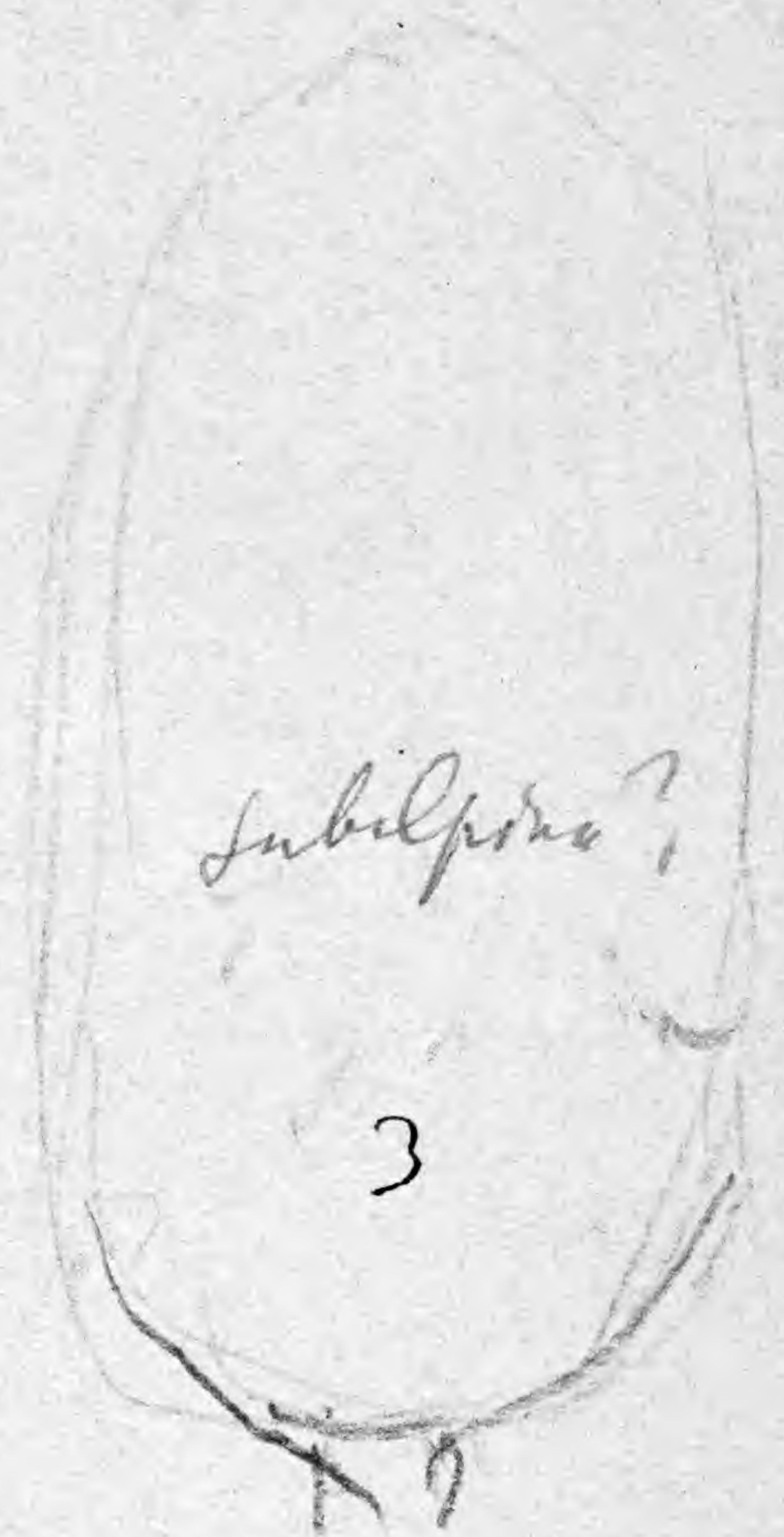
concolor?

1



grandis?

2

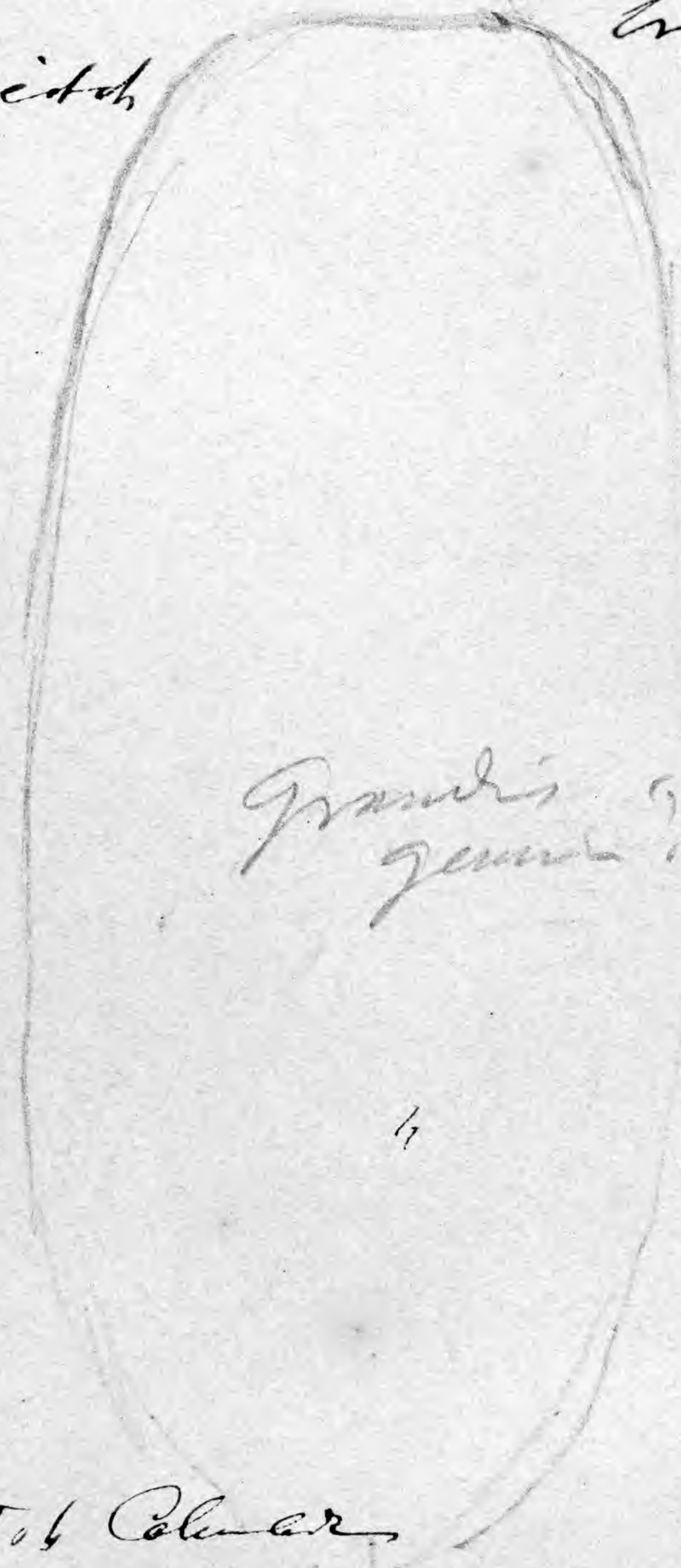


subilpina?

3

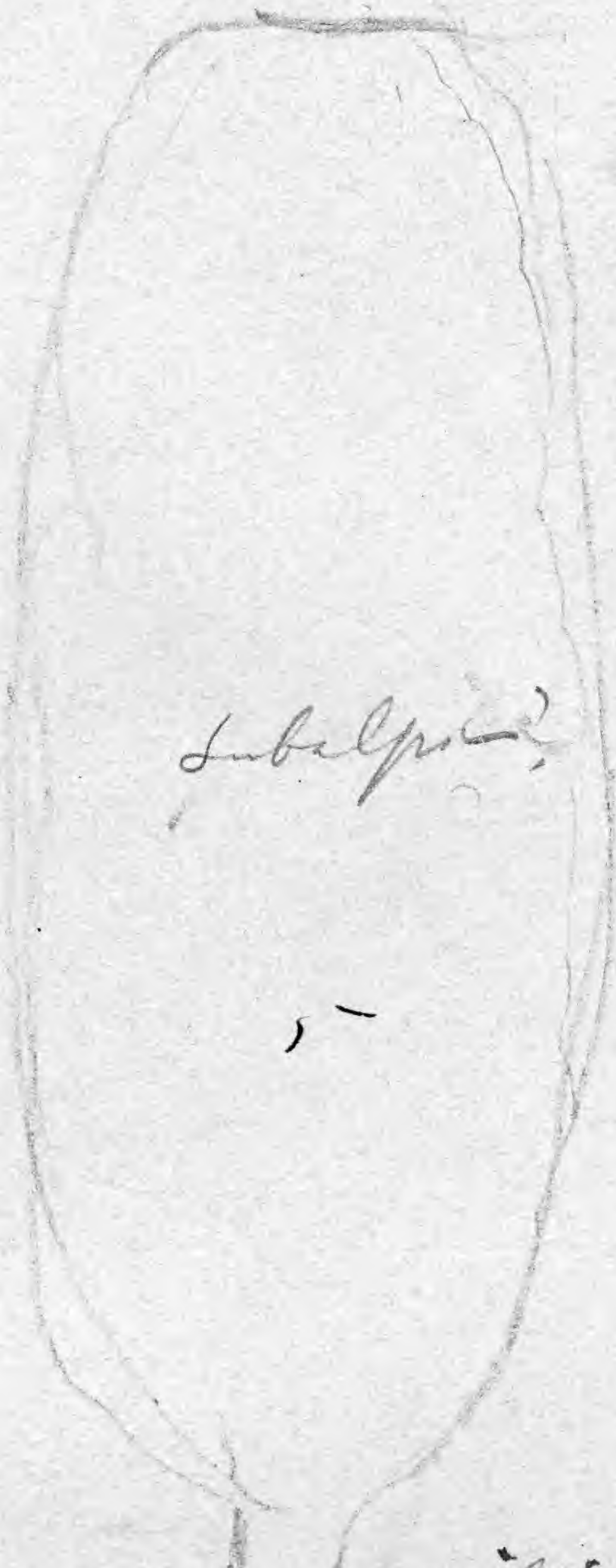
1. *A. grandis*
California
Myers Vitch

2. 3 *A. grandis*,
in Litch North America D. Lyell
Aug 1862



grandis?

4

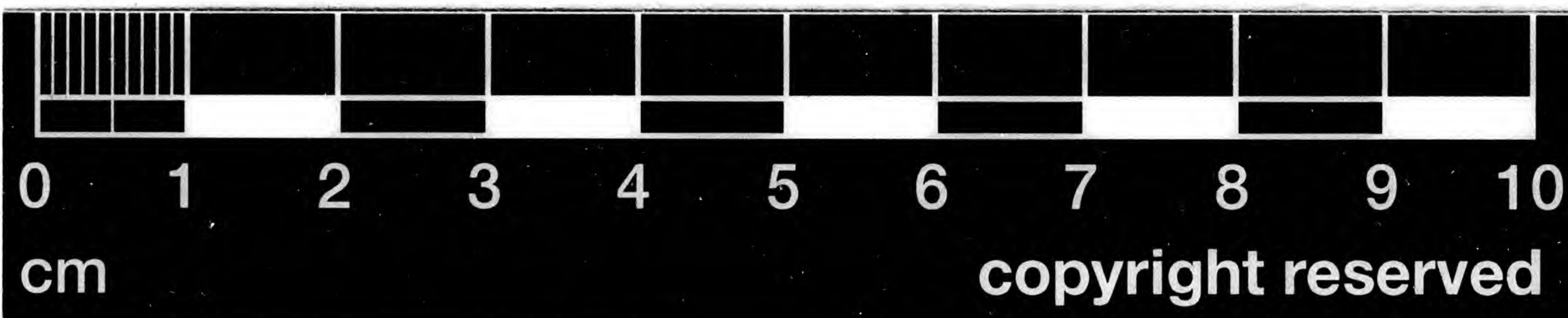


subilpina?

5

4. 5
Sumass, Brit. Col. ex
Sumass Nov 1859 D. Lyell

called here *A. amabilis*



MISSOURI
BOTANICAL
GARDEN

copyright reserved

12807

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Brewer's letter to Dr Parry, San Francisco March 14th 1864

Three species of *Picea* common in the Sierras,

P. nobilis not south of Mount Shasta, where

it is the upper most large tree, growing to alt. 8000

[magnifica!] *Picea amabilis* replaces it at all the higher

Sierras south of Mount Shasta — the habit of

the two trees are very much alike.

[concolor!] *Picea grandis* grows lower, beginning at

about 4000 feet, most abundant at 5000' — cones

like those of *P. amabilis*, only much smaller. Tree

not so beautiful

P. bracteata not seen.



0
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI
BOTANICAL
GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

12808



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



Dolaner in Litt Dec 24 1869

Abies bracteata

A. nobilis

A. grandis on the Sierra in Mariposa,
(= *concolor*) and along the Rail road, 3-8000'
Trunk gray-white, leaves distichous,
very pale ^{light} green; cones 3-4 inches
most abundant fir in California.
"white fir" poor timber
Mariposa 7000 - 10000'

A. amabilis

= meg-fir

trunk cinnamon brown red
Therefore "red-fir" excellent timber



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

12809

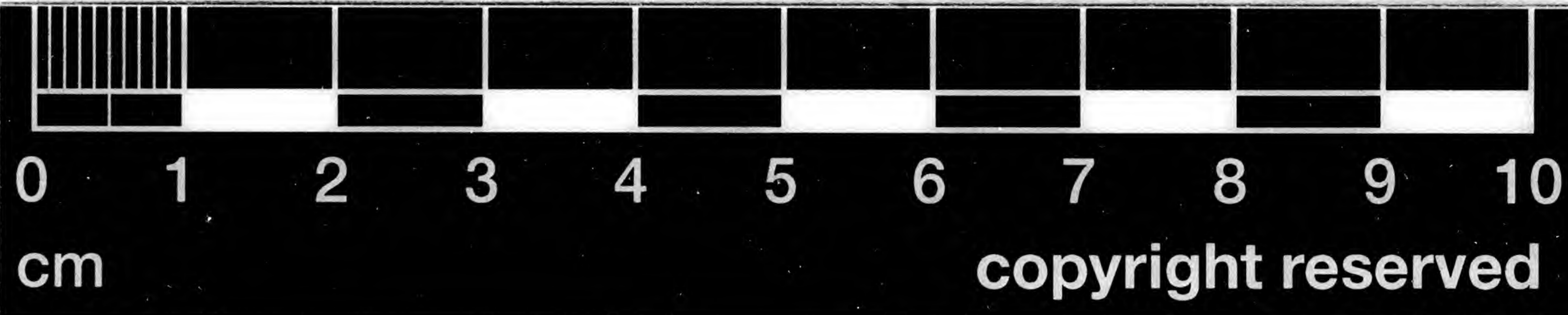
Wm. Kew Sept 1869

Sumatra British Columbia Lyall



Callit. amabilis







MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



MISSOURI
BOTANICAL
GARDEN

copyright reserved

Sections of *Abies* leaves copied from Murray April 1872
Proc Hort. Soc. VII. July 1863

- A. lasiocarpa* Hook  stomata both sides - on upper more
near tip
- A. bifolia* Murr   stomata both sides - b. stout acute
leaf from body of branch
- A. lowiana* Gordon  stomata both sides, etc
- A. magnifica* Murr   stomata on both sides, etc
b. leaf of very young
plant

evidently all sections made on the dry leaf



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Wright & Carlisle

DRUGGISTS

South-west
Corner Fifth and Market
Streets

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

12810



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

My Contrib. to Wheeler's Report

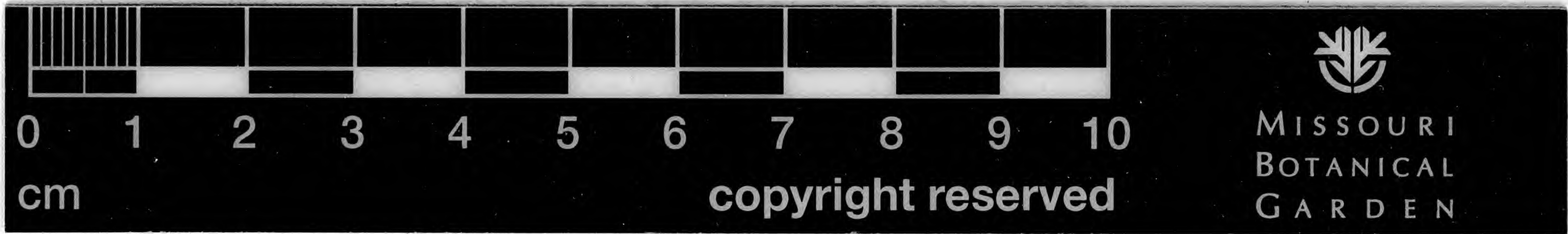
Abies Link, not Don; Abies sect (Fors) Gray's Man; Pinus sect Abies Curt. Parlat.
Picea, Don. ^{single}

Coniferous trees with more or less flattened and on the sterile branchlets, by a twist near their bases,
2-ranked, sessile, persistent leaves which leave ^{flat} oval scars; flowering from the axils of
the leaves of the previous year; staminate flowers in the form of an oval or cylindrical ^{flat} of last stipitate
~~anther~~ ^{involucre of numerous scales} without crests, bursting transversely, with large ^{coll-0.54 mm in the longitudinal} 2-lobed polliniferous
cones erect on the more or less horizontal branchlets, maturing in the first season; these scales together
with their (enclosed or exserted) membranous bracts falling from the persistent axis. seeds
covered with balsam-veinules and partially but permanently enclosed in the perigynarum
base of the wing, which covers the outer and overlaps the inner surface. ^{laps over} Strobili ^{pyramidal}
of rapid growth, but with brittle and rapidly decaying wood. Residues ^{Strobili} ^{pyramidal}
or peripheral on the lower side of ^{with peribymata}

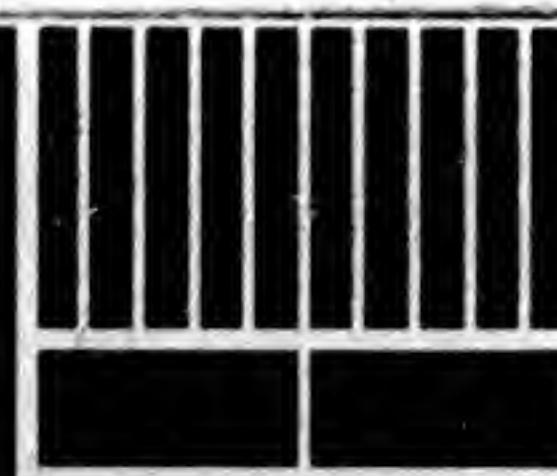


12811

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



Gravids!	branch	Best
Victoria gl	smooth	resin
" white gl	slightly pub	slightly 29.
Victoria! gl	" "	resin
Mudocino Clark ^{Ad} _{very}	pub	res.
Pollen gl	slightly pub	res <u>large</u>
Dropman Cult	" "	resin
and all my cult	"	
Willamette Hall	nearly glabrous	
Oregon Infund	pub	resin
White Ferr. Wilson	pub	resin



0 1 2 3 4 5 6 7 8 9 10

cm

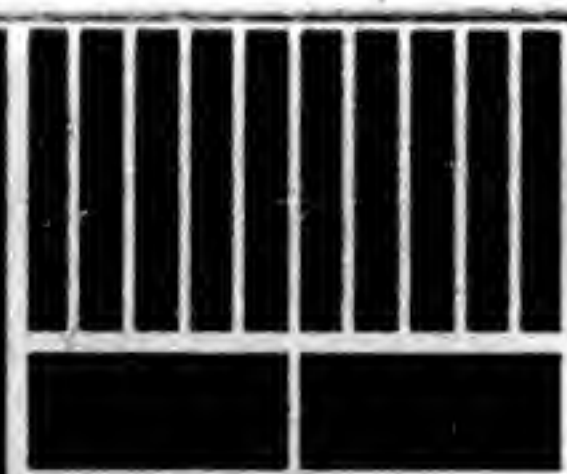
copyright reserved



MISSOURI
BOTANICAL
GARDEN

12812

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

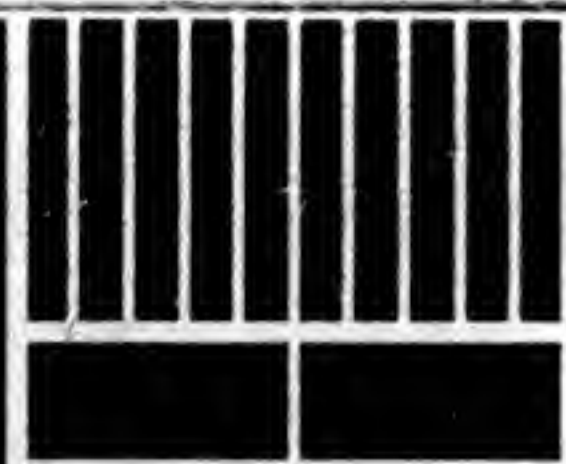
cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Location	Condition	Notes
Louis	bud	bud
Shast, Owens, pub	pub	resinous
City Lake (condo)	"	nearly smooth
Shast Gray	smooth	smooth
Blanche Redhook (condo)	"	resinous
J. Bernardin Park	"	"
Faffield's Ranch Bigelow	"	nearly smooth
Clark's Bolander	"	resinous
— Fremont puberul		"
Parsonia Hannuall with	smooth	nearly smooth
Canopy Dropan	" "	resinous
Summit A.R. G.E	"	
Shast	slightly puber	nearly smooth
"	smooth	" "
"	"	resinous
"	"	nearly smooth
"	"	resinous
Siskiyou	"	res.
Blue Mtn Gray Quartz	pub	



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

copyright reserved



MISSOURI
BOTANICAL
GARDEN

12813

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

A. perispermifera
Aug 1



0 1 2 3 4 5 6 7 8 9 10

cm

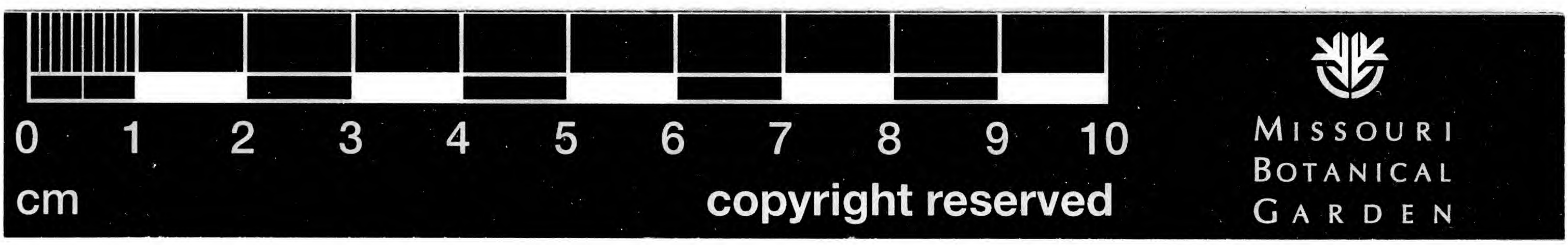
copyright reserved



MISSOURI
BOTANICAL
GARDEN

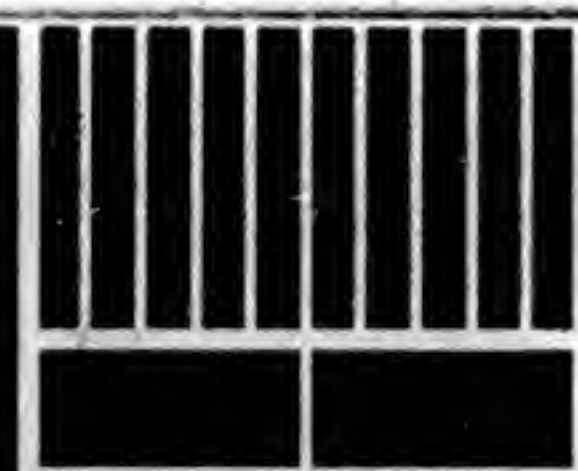
Collector	Locality	Scale	Notes
Utah Muir		small	resinous
Ill. Lake Jr		-	-
Coland Bridger		"	"
Mt Graham	Leaman	"	"
San Francisco Mt	Bridgely	"	" slightly
Mt Graham	Prothrock	"	" slightly
South Mt	Perry	pub. & sm.	
Provo "	"	" & sm.	
Spring Lake	"	small	very small
Utah	Siber	pub.	resin
St. George	Johns		
Academy	Siber	pub.	

east slope of Sierra Nevada
 Planché Mtn, Prothrock is complete
 Carson City Wilson Concolor



12814

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI
BOTANICAL
GARDEN

Gordon Pinetum Suppl. p. 52 1862

p. 52. *Pinus grandis* found by Douglas in north. California, & quite lately sent by
Bridges to British Columbia & Vancouver Island
cones $3\frac{1}{2}$ - 4 inches long $1\frac{1}{2}$ broad - cones pectinate

p. 53. *Pinus Louisiana* Gordon [published here for the first time] found by W^m Lobb the
collector of Row & Co, of Clapton nursery, British Columbia & North California
at first mistaken for *P. grandis*, & still taken for it

~~by *Pinus lophosperma* Lindl. sent by Lobb early in 1860, planted by Dudley - Gordon's Thron.
1860 p. 46~~

Gordon Pinetum 1858

p. 149 *Pinus nobilis* - leaves falcate - flat dull green above, silvery beneath
cones 6-7 x $2\frac{3}{4}$ inches -

p. 154 *P. amabilis* cones flat irregularly densely 2 rowed, incurved, blunt pointed
cones 6 x 2 inches -

p. 155 *P. canadensis* Lindl [I can not find where published in Dudley - Gordon's seems first publication

" *P. grandis* cones flat, 2 rowed, obtuse or bifid $1 - 1\frac{1}{2}$ inch long
cones $3\frac{1}{2}$ x $1\frac{1}{2}$ inches cones truncate

P. coloradensis Gordon to Hooker & Hochstetter a form of *resinosa*



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



MISSOURI
BOTANICAL
GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



12815



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



MISSOURI
BOTANICAL
GARDEN