

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.*

*Juniperus Californica*, Monte Diablo

J. G. Lemmon April 1878

3 1/2 feet diam at base and

only 12 feet high!



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

ing, or given to the  
will number the Blanks consecutively as received, and bring them before the  
*Standing Committee* for action at the next regular committee meeting after receipt.  
He will then endorse the action of the Committee on each blank, and give them to  
the *Permanent Secretary*. The names of members elected will be published in the  
daily programmes. New members, if present, are expected to call at the desk of  
the Permanent Secretary for their tickets. Copies of this blank will be furnished  
by the Permanent Secretary on application.—F. W. PUTNAM, *Permanent Secre-*  
*tary, Salem, Mass.*

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

13166



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

My specimens of Juniper & Calif.

Bridges 291 in Hb Kew

Adams & Heller Bear Valley.

Lobb. 438

Parry 1850 San Felipe

Fremont 2<sup>d</sup> Exp.

Bear Mountain Torrey

Brewer 791 New Idria

" 792 " "

Palmes 91 Guadalupe Island

W W Hays Santa Lucia Mts

Greene 688 Yoana

Brewer 110 San Gabriel

126

127

110-112

840

Mt. Diablo



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

13167

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

*[Faint handwritten notes in a table format, possibly botanical data]*



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

all these quotations at the end of the paragraphs  
are ~~not~~ <sup>not</sup> ~~in part~~  
1. *J. Californica* Carr. (~~Proc. Hort. 3. 352. (1854); Calif. 58~~ *J. occidentalis*, ~~in part~~  
~~Parlat. in St. Prot. 16. 2. 490.~~)



0

1

2

3

4

5

6

7

8

9

10

cm

copyright reserved

MISSOURI  
BOTANICAL  
GARDEN

13168

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



0

1

2

3

4

5

6

7

8

9

10

cm

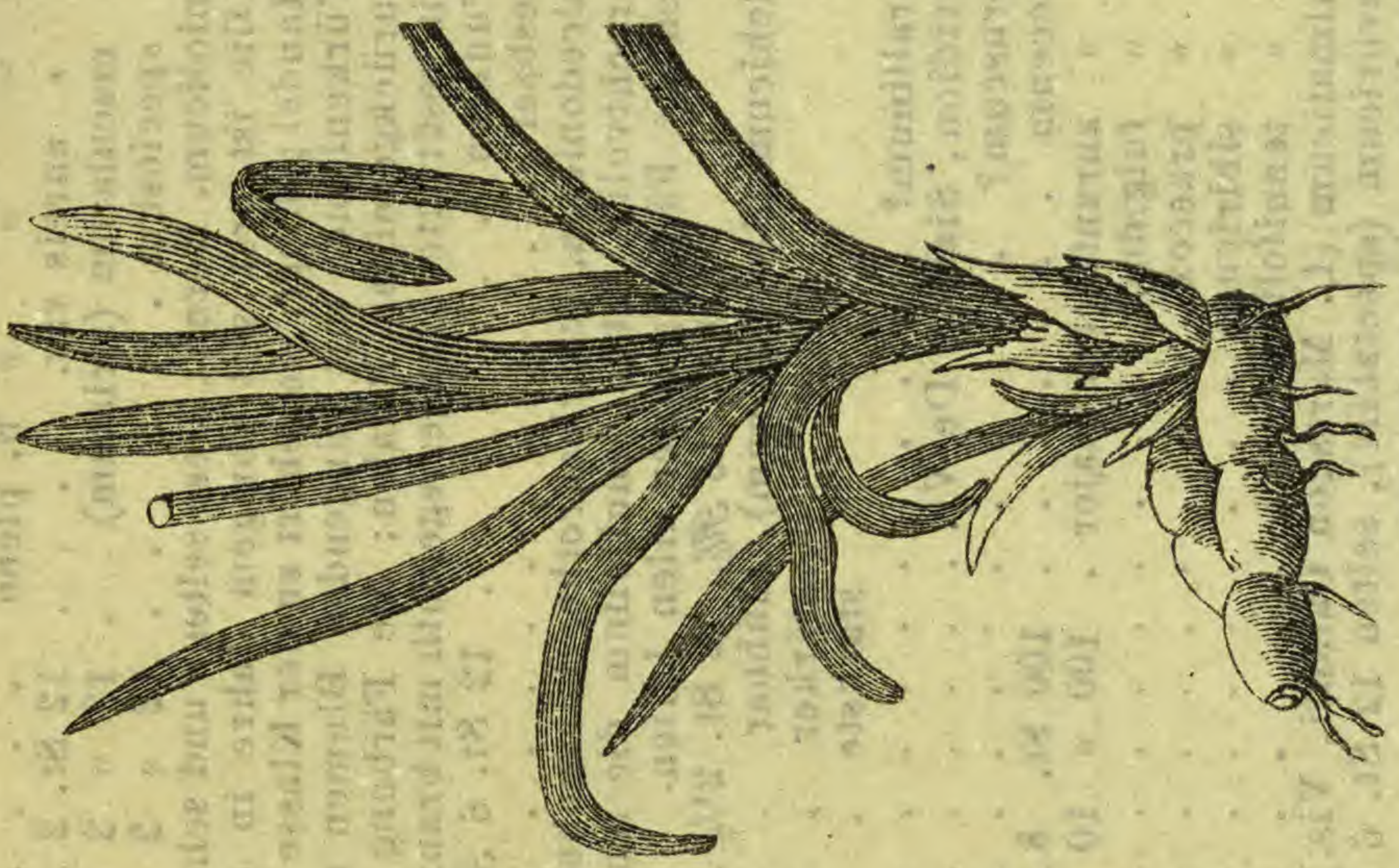
copyright reserved



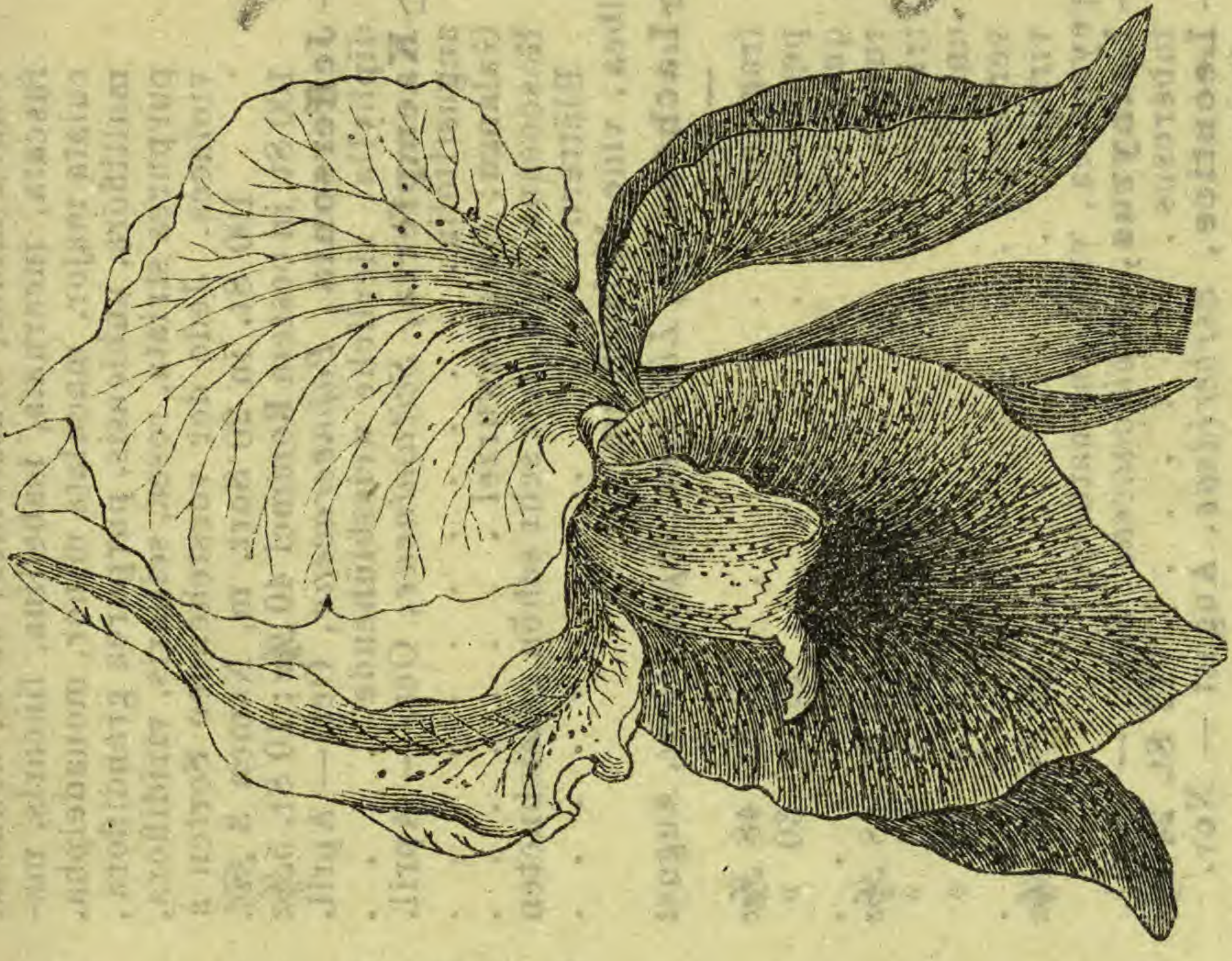
MISSOURI  
BOTANICAL  
GARDEN

HYMENOCALLOS

- **Hycosyamus**, *Solaneae*, Sept. — April.  
orientalis, schöne purpurosa Blumen . . . 6  
Scopolia . . . . . 4
- **Hypoxis**, *Liliaceae - Hypoxidoideae*, Sept.  
— Nov.  
breviscapa . . . . . 8  
erecta . . . . . 6  
sobolifera . . . . . 6  
stellata . . . . . 6  
villosa . . . . . 12

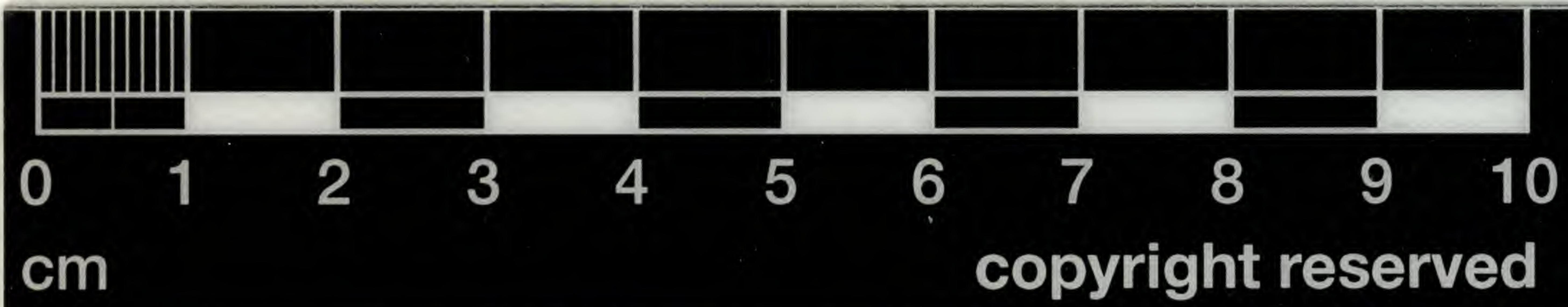


*Iris iberica*.



*Californiana* var *Utahensis*

- b. Species mit fleischigem Wurzel-Rhizom,  
Sept. — April.
- fürs freie Land ohne Bedeckung:  
albionensis alba, schön . . . . . 4  
" coerulea, schön . . . . . 4  
attica pumila . . . . . 4  
aurea . . . . . 4  
californica . . . . . 6  
erratica, schön . . . . . 12  
horentina . . . . . 4  
" . . . . . 4



copyright reserved



*Inscata*, *inermis*, *laevifolia*, *linearis*, *maculata* major, *maculata* minor, *monadelphica*, *multiflora*, *nubiensis*, *purpurea grandiflora*, *purpurea striata*, *rosea*, *scillaris*, *viridiflora*, *violacea*. Jede der vorstehenden Sorten à 2  
 100 St. in 20 Sort. m. Namen 3 *Fl.*  
 — **Jeffersonia**, *Papaveraceae*, Oct. — April. 100 St. in bestem Rommel 40 *Ygr.*; 10 St. 5 *Ygr.*  
 ◇ **Kempferia**, *Scitamineae*, Oct. — April. 10  
*diphylla*, zierliche weissblühende . . . . . 10  
*angustifolia*. . . . . 10  
*Galanga*, Galgantwurzel . . . . . 10  
*Roscoeana*, neu, mit sehr schön gezeichneten Blättern . . . . . 60  
*Kolbea*, vide *Melanthium*.  
 ▢ **Lachenalia**, *Liliaceae-Asphodelaceae*, August — Oct.

*fragrans* . . . . . 12 St. 48 *Ygr.* 6  
*pendula* . . . . . 12 » 30 » 4  
*quadricolor* . . . . . 12 St. 48 *Ygr.* 6  
*rubida* . . . . . 12 » 48 » 6  
*tricolor* . . . . . 12 » 48 » 6  
*unifolia* . . . . . 12 » 48 » 6  
*versicolor* . . . . . 12 St. 48 *Ygr.* 6  
*viridis* . . . . . 12 St. 48 *Ygr.* 6  
*Lapeyrousea*, vide *Anomatheca*.  
 — **Lathyrus**, *Papilionaceae*, Sept. — April. 3  
*tuberosus* . . . . . 12 St. 24 *Ygr.*  
 — **Leontice**, *Berberideae*, August — Nov. —  
*altaica* . . . . . 20—40  
*Leontopetalum*, Löwenblatt . . . . . 20—40  
 var. » » *fl. pleno* . . . . . 12 » 2 » 3  
 » » aureis var. . . . . 12 St. 2 *Fl.* 50  
 » *maculatum* (*striatum*) . . . . . 12 » 2 » 6  
 » *speciosum* . . . . . 12 » 2 » 6  
*carriolicum*, Bernh., diese seltene und schöne Lilie ist erst seit vorigem Jahre in den Handel gelangt; sie gehört zu der Klasse der Türkenbunde mit hängenden Blumen und zurückgerollten Petalen; die Färbung ist ein gesättigtes orangeziegelroth mit braunen Punkten . . . . . 12 St. 6 *Fl.* 20  
*Catesbaei* . . . . . 8  
*chalconicum*, scharlachrother Türkenbund, prachtvoll, neben *tenuifolium* die leuchtendste Färbung unter allen Lilien.  
 100 St. 16 *Fl.*, 12 St. 21/2 *Fl.* 8  
*Colchicum* (*Szovitzianum*), blühbar stärker 20  
 stärkster 30  
 40—60  
 corallinum? . . . . . 60  
 Coridion, Sieb. & De Vr. . . . . 80  
 cornusum? . . . . . 60  
*croceum* . . . . . 100 St. 8 *Fl.* 4  
 » *aurantiacum* major . . . . . 10 » 5  
 » *fulgidum* . . . . . 8  
 » *praecox* . . . . . 12  
 » *sibiricum* . . . . . 8  
 » *tenuifolium* . . . . . 8  
 » *dalmaticum* (L. Martagon *Catanii*, Vis.) . . . . . 150  
*davuricum* (*spectabile*), selten 12 St. 6 *Fl.* 20  
*excelsum*, vide *testaceum*.  
 ▽ *eximium* verum . . . . . 12

MISSOURI BOTANICAL GARDEN  
 GEORGE ENGELMANN PAPERS

13169



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

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

*Juniper* California

July 17 1874

var

Cedar City Utah  
collected July 6<sup>th</sup>

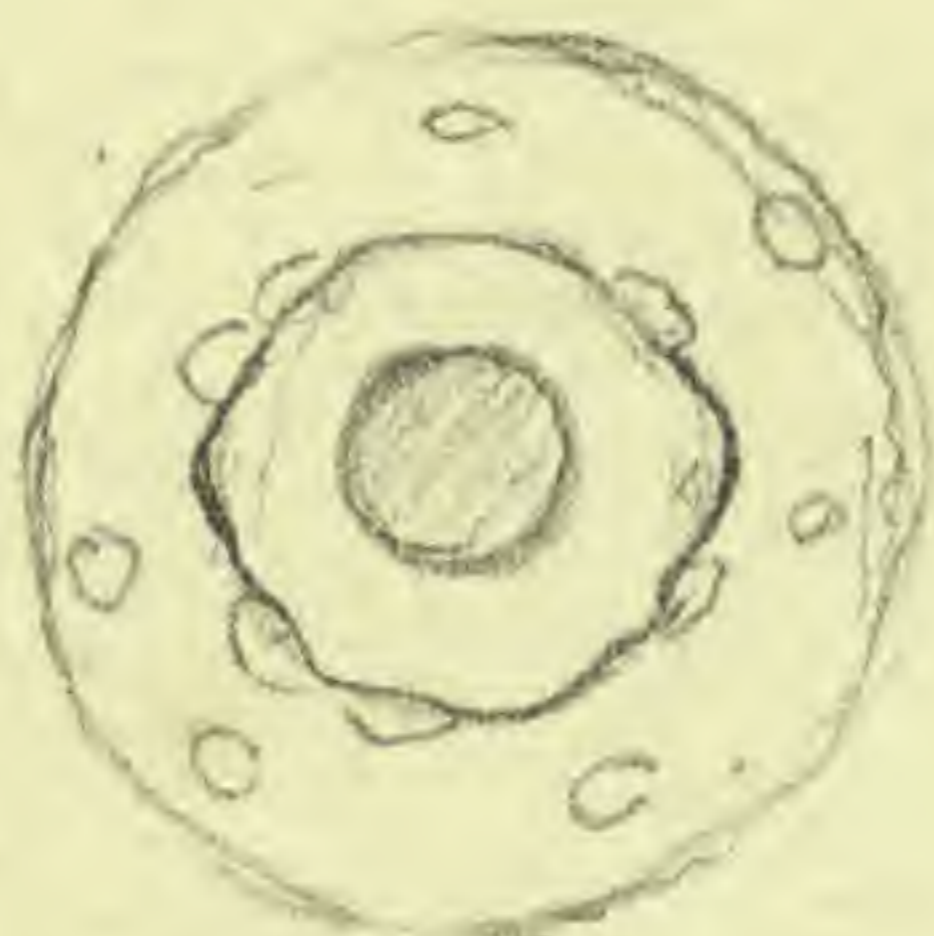
most seeds  
with 4, a very  
small one with  
3 Cotyledons

x2



boiled

x2



section of  
berry

x2



scales = 3  
often = 2<sup>s</sup>

x10



top view



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

R. C. HARRISON,

508 Leffingwell Avenue,

**D**ruggist & **A**pothecary

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

G. F. ENGLEMAN, M.D.,  
3003 LOCUST STREET.

13170



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

*Jasminum* Calif ?

June 13 1877

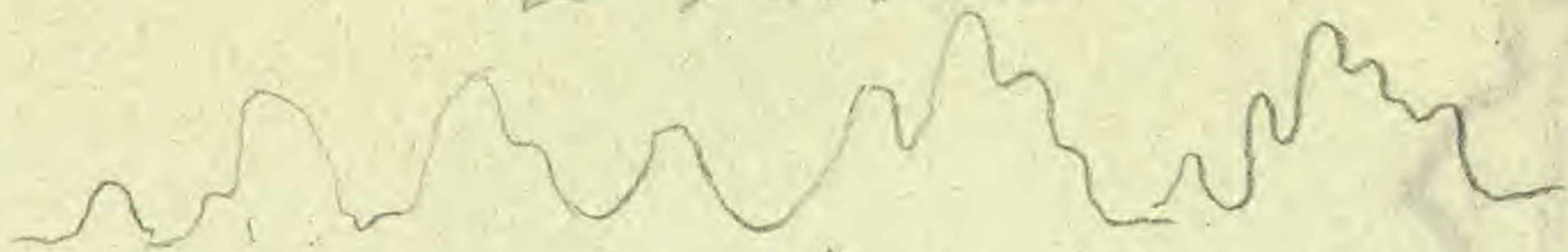
*leucodermis*

& Palmer Utah May 1877

x7



x2



x280

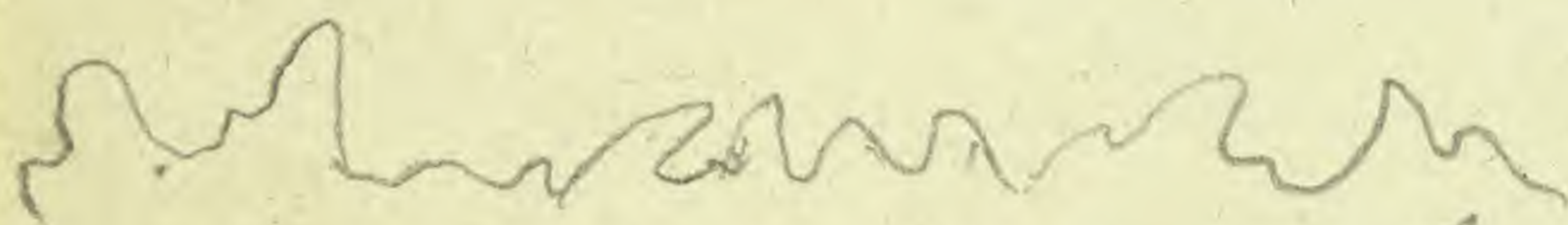


edge of leaf

fruit with 2, 2 and 3-nerved,  
vertical

scales very knobby  
sharp

single large seed



edge of male bract  
(anther-scale)



The leaves of *Utahensis*  
collected by Palmer May 2<sup>nd</sup>  
1877. are similar, same  
edge - in 3 or 4  
fruit larger, not knobby  
seed the same



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

13171



ALEX. LEITCH,

APOTHECARY & CHEMIST,

Cor. 4th and Olive Sts., St. Louis.



MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

100

156

157

+<sup>cc</sup>

1176

+<sup>cc</sup>

1186

+<sup>cc</sup>

1208

In these, Q. Hurdii is the great oak of  
the hills, usually with broad leaves and  
maple appearance. - What I here call  
Q. Garyana is perhaps Q. Douglasii, has  
bark much thinner than the last and  
grows on a drier soil - more often on the  
best hills -



0  
cm

1

2

3

4

5

6

7

8

9

10

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

13172

Juniper Californica <sup>n.</sup> up to altit. of 2000 feet 12-15 feet  
high, often 30 feet high; trunk at base up to 3 feet or  
more  
branching from base, wide heads, 20-40 feet diam

Mount Diablo Range, Brewer May 1862

*P. Balfouriana* on high granite hills to the Mokelumne River  
Brewer Aug. 1863

on Pyramid Peak Aug 20 1863 *P. Balfouriana* as much

as 5-6 feet diam. - *P. albivirens* goes higher up

W H Brewer

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

Iris		à Stück	gr.
foetidissima	12 Stück	15 gr.	2
» fol. arg. vittatis			8
fareata, schön.	12 St.	15 gr.	2
» fl. albo	12 »	20 »	3
germanica			
1 Sortiment von 50 Prachtsorten	5 gr.		4
1 »	25 »	2 »	3
1 »	12 »	24 gr.	3
in schönem Rommel	100 St.	2 gr.	4
graminea			
Güldenstädti	12 St.	20 gr.	3
laevigata			8
pallida (odoratissima)	6 St.	24 gr.	6
Pseudo-Acorus			4
pulchella			10
pumila in 6 verschiedenen Farben.			4
alle 6 Sorten zusammen	20 gr.		
» in bestem Rommel	100 St.	2 gr., 10 St.	8 gr.
ruthenica			6
tridentata			20
variegata, reizend			4
versicolor			6
△ für's freie Land während des Sommers, frostfrei zu überwintern oder gut zu decken.			
constantinopolitana			6
fimbriata (Moraea), sehr schön			6
japonica			8
» Colonia, dunkelviolett			20
» Leona, milchweiss m. hellilla gefleckt			20
» Lutetia, weiss, lilla geädert mit lebhaft blauem Fleck			20
» Massalia, blasslilla mit dunkel viol. Fleck			20
» Psyche, dunkelviolett m. weiss geädert			20
» Thalia, hellviolett, einfarbig			20
iberica (Oncoocylus)	12 St.	5 gr.	15
neben Iris susiana, die schönste und auffallendste aller Iris.			
Kaempferi			4
longipetala (Californien)			12
odoratissima Jacq. (pallida, Lam.)			6
susiana, Dame in Trauer, reizend schön, sehr rar geworden			15
Leontice			
à Stück gr.			
Ranwoldi, vide Bongardia.			
thalictroides, vide Caulophyllum.			
Leucocoryne, Liliaceae-Hemerocallidaceae, Spätherbst.			
odorata, Lindl.	12 St.	4 gr.	15
— Lencojum, Amarjllidaceae, August — Oct.			
aestivum, Sommerschneeglöckchen.			
pulchellum	100 St.	2 gr.; 10 St.	8 gr.
» majus			4
vernum, grosses Waldschneeglöckchen			8
1000 St.	12 gr.; 100 St.	1 1/2 gr.; 10 St.	6 gr.
— Liatris, Compositae, Oct. — April.			1
elegans			8
macrostachya			8
pumila			8
pycnostachya			8
Elegante meist purpurroth blühende Zierrpfl.			
— Libertia, Iridaceae. In Töpfen das ganze Jahr.			
azurea			8
floribunda			8
formosa			8
grandiflora			8
pulchella			8
tricolor			8
△ Liliorhiza, Liliaceae-Tulipaceae, Aug. — Oct.			
lanceolata, ein zierliches, den Fritillarien nahe stehendes Zwiebelgewächs aus Californien; die hängenden Glockenblumen haben eine grünlichgelbe Färbung			50
— Lilium, Liliaceae-Tulipaceae, Sept. — Nov.			
auratum			—
Zwiebeln 1. Grösse (4—6 Blumen)	12 St.	12 gr.	40
» 2. » (2—4 »)	12 »	10 »	30
» 3. » (1—2 »)	12 »	7 »	20
Die jetzt für Herbstversendung offerirten auratum sind bei uns cultivirte Zwiebeln, ganz frisch und gesund.			
auratum rubro-vittatum	à Stück	14 gr.	—
» virginalis	à »	14 »	—
Brownii			—
bulbiferum			—







*Juniperus occidentalis*

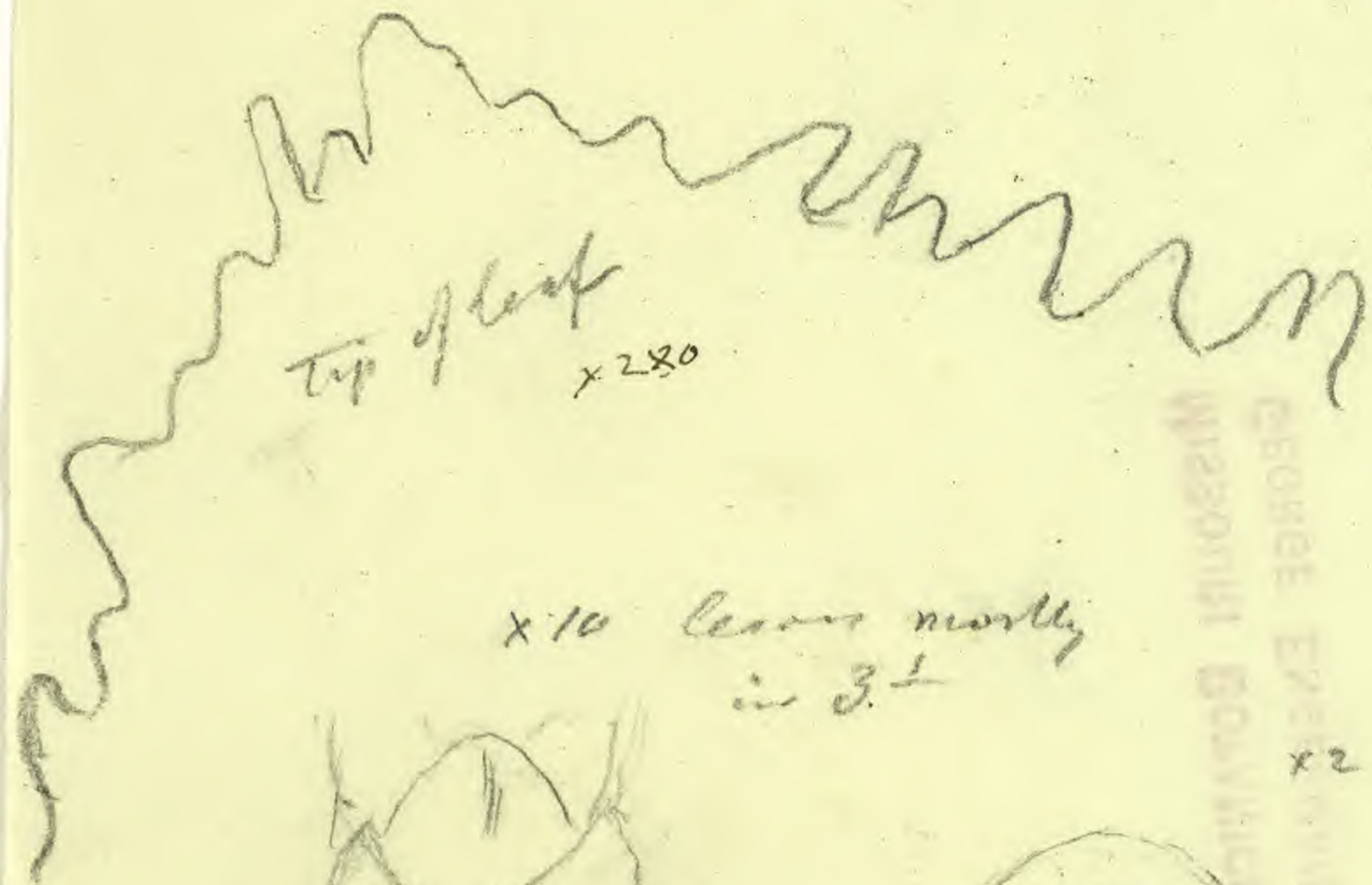
Febr 12<sup>th</sup> 1874

Herb Agric. Dep.

Salmon Trout River [Nevada]

Forsman's Exped. Dec 1. 1845

= Camp Floyd plant



x10 leaves mostly  
in 3's



no glands visible



x2

two berries preserved  
detached, both with  
scales in 2's



x2

single large  
seed



0 1 2 3 4 5 6 7 8 9 10

cm

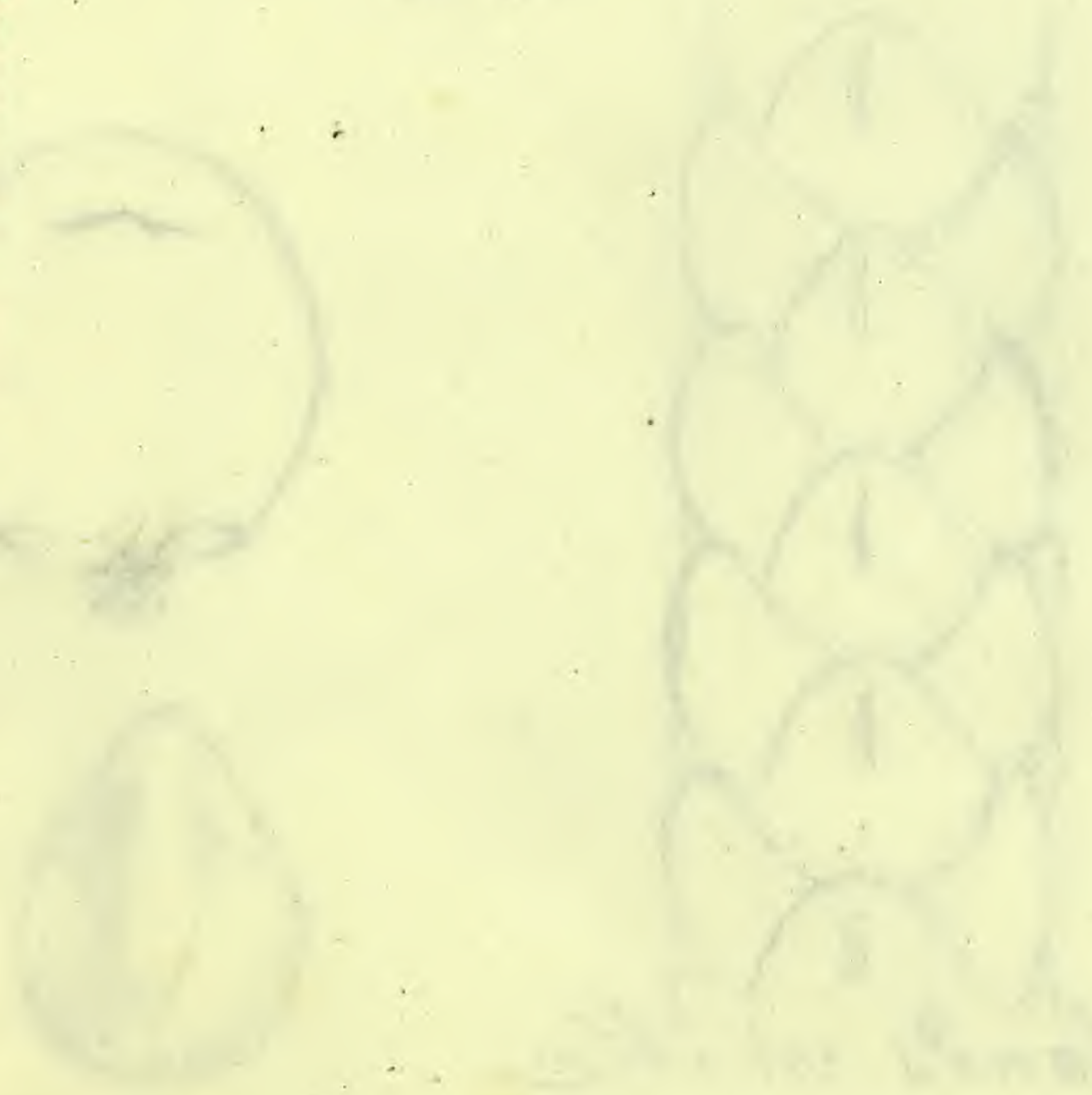
copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

**ALEX. LEITCH**  
**APOTHECARY & PHARMACEUTIST**  
COR. 4TH & OLIVE STS. ST. LOUIS.

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



13174



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



MISSOURI  
BOTANICAL  
GARDEN

*Juncus* *ovoid.*

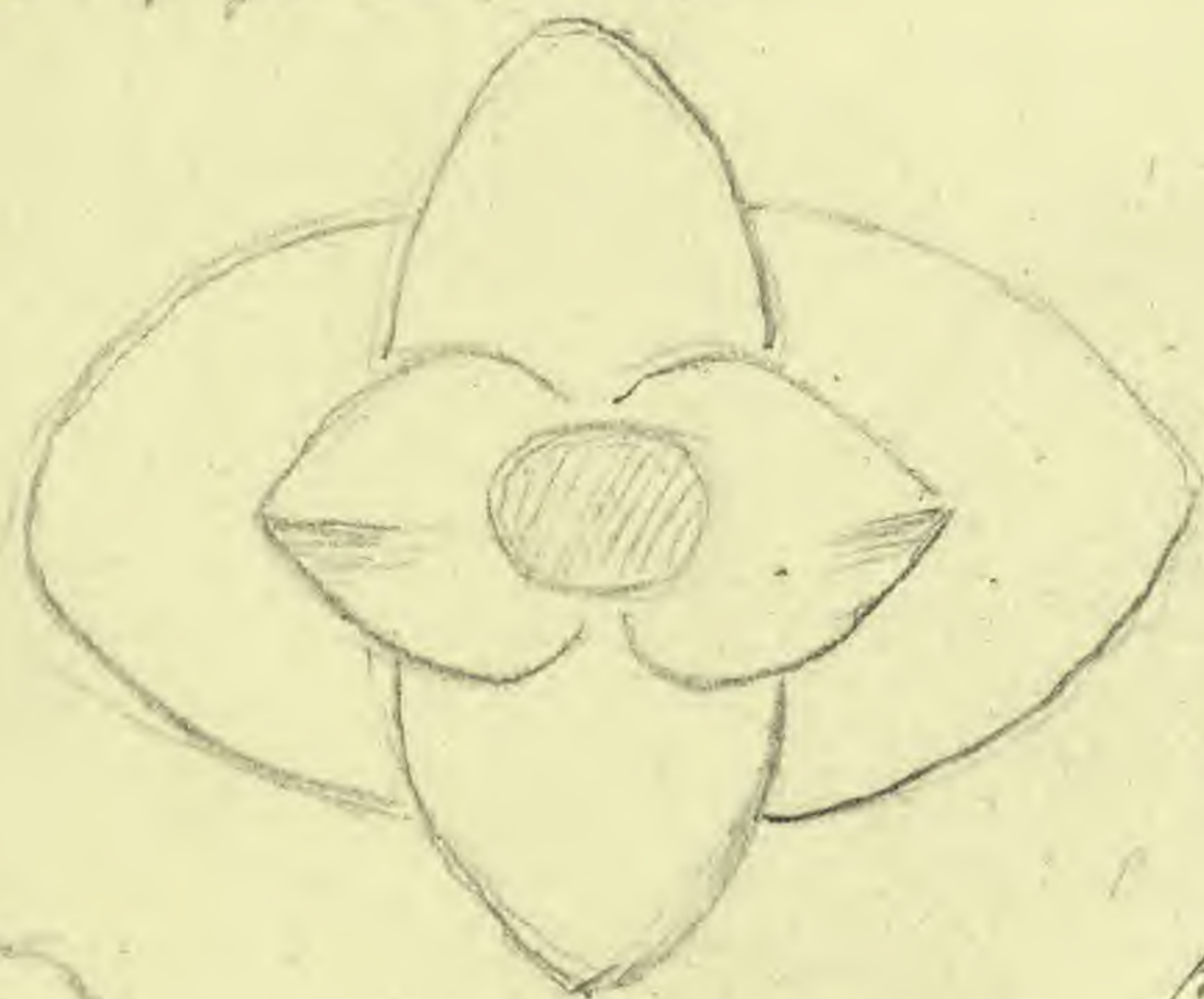
stoutest form, largest berries

Camp Floyd March 1869

Jan 8 1874

H. Engelmann

base of fruit x 10



Seed x 2



sect of berry

2 pale dull triangles

sect. of 2 seeds fruit

probably corresponding



section of seed

no embryos, seed full grown but not mature in March



largest seed seen x 2

to the pairs of leaves

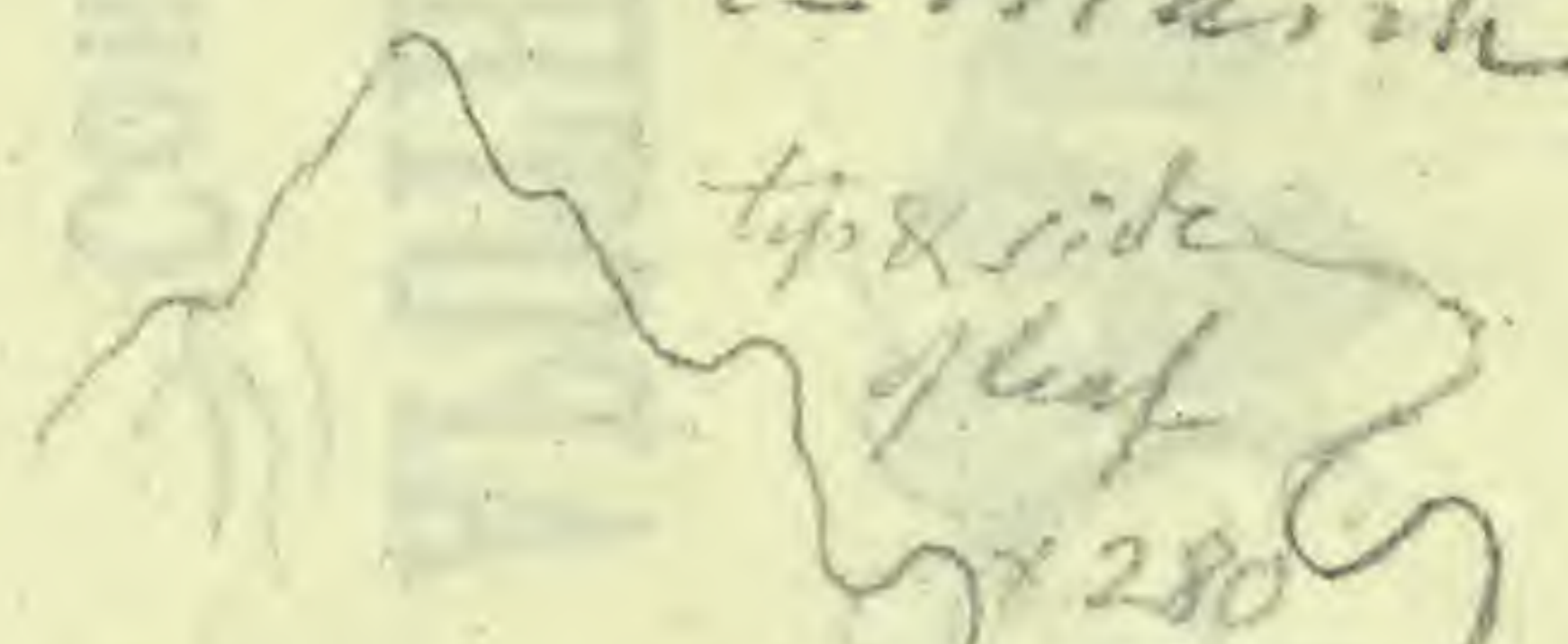


above branchlet

leaves x 3'



branches mostly 4 joint



tip & side of leaf

x 280



tip of leaf x 160

berry x 2, with 4 knobs (tip of scales opposite) leaves of branchlet = 2<sup>s</sup>



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,

APOTHECARY & PHARMACEUTIST,

COR. 4TH & OLIVE STS., ST. LOUIS.



MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

13175



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

*J. occidentalis*  
*narrowmpana*

July 23 1876

Fort Whipple, Arizona, Dr. Conroy Palmer

x10



immature x2



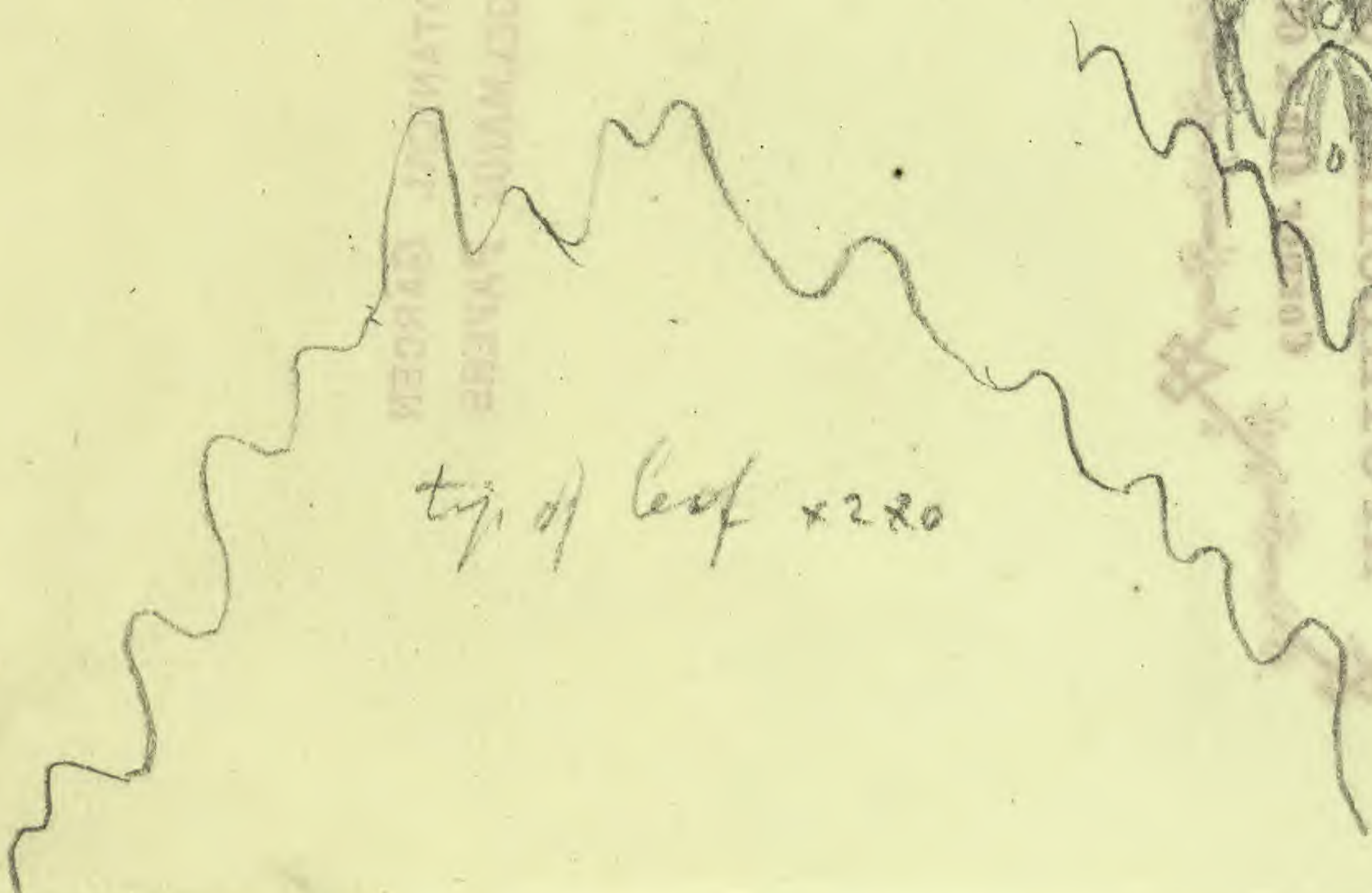
fruit scales = 2<sup>d</sup>

x10



leaves mostly  
= 3<sup>d</sup>

tip of leaf x220



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

ALEX. LEITCH,  
APOTHECARY & PHARMACEUTIST,  
Corner 4th & Olive Streets, St. Louis.

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

18176



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

*Juniperus Utahensis* St George, Utah  
about 20 feet high - the usual firewood of the country  
branches low down - bark shreddy; heartwood  
dull red, slightly fragrant  
St Parry April 14 1874



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN



MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

18177



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

*Juniperus Utahensis*

April 2 1874

immature green fruit

Provo, Utah, Dr Parry March 1874

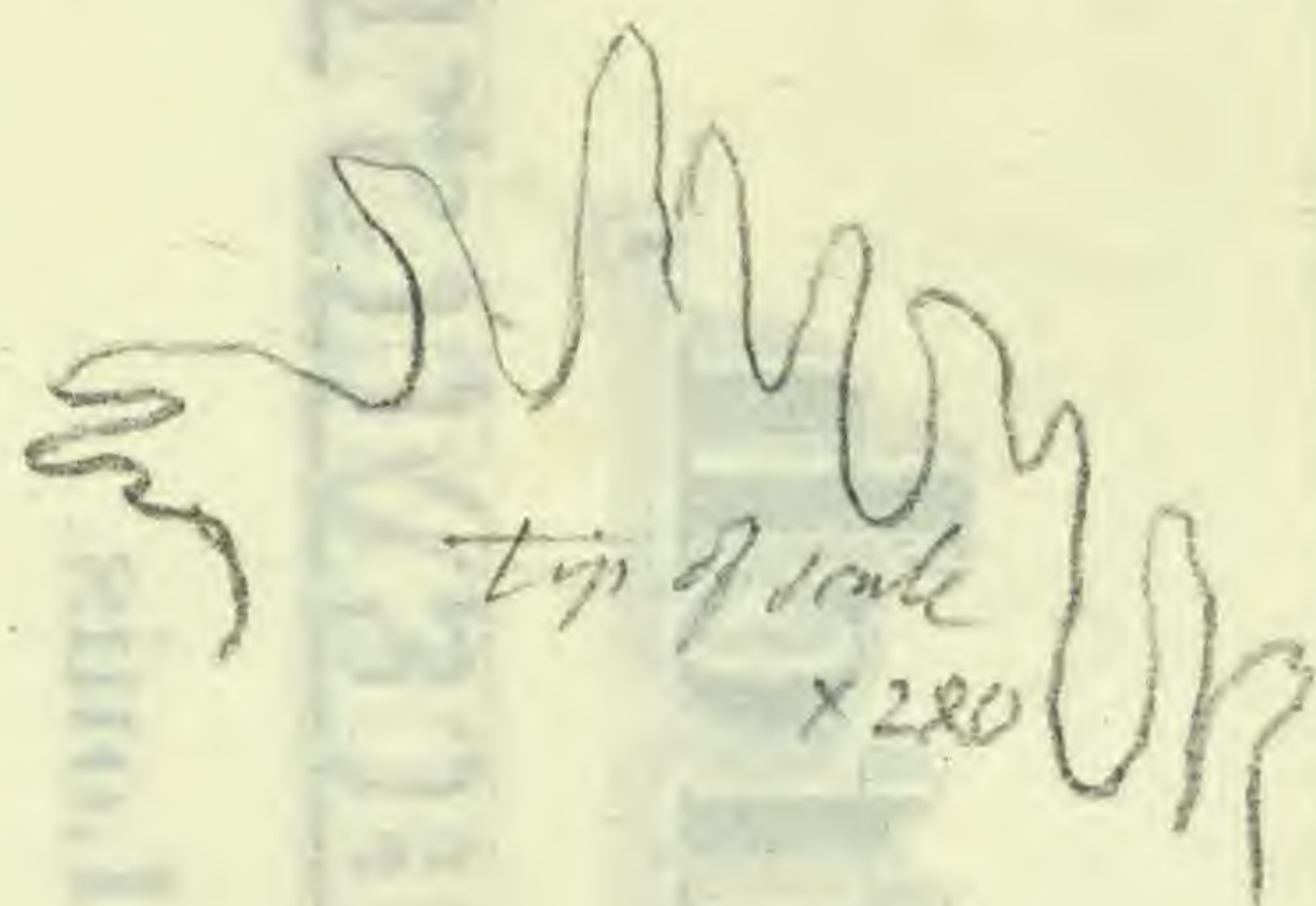
all seeds

wormy!



scales always in pairs

seeds single pulp thin & dry, immature

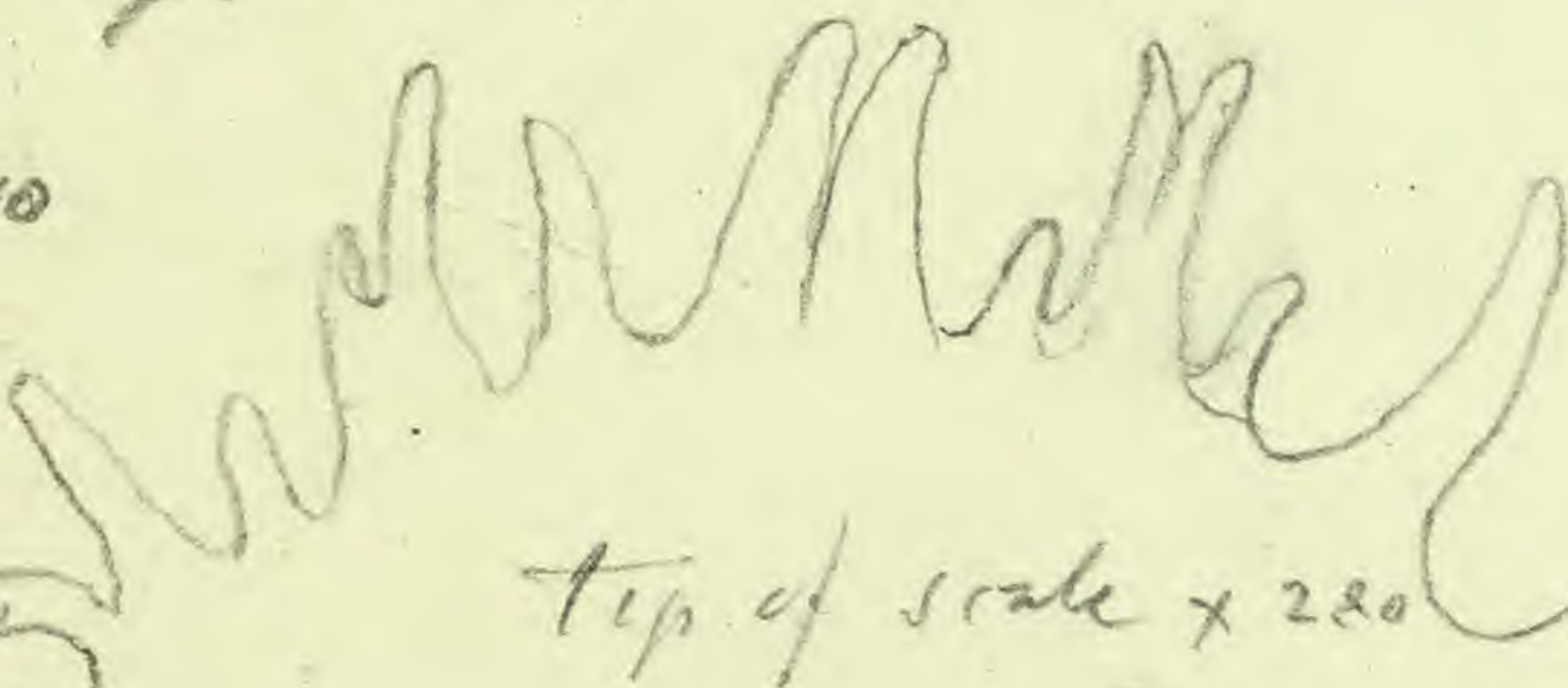


tip of scale x220

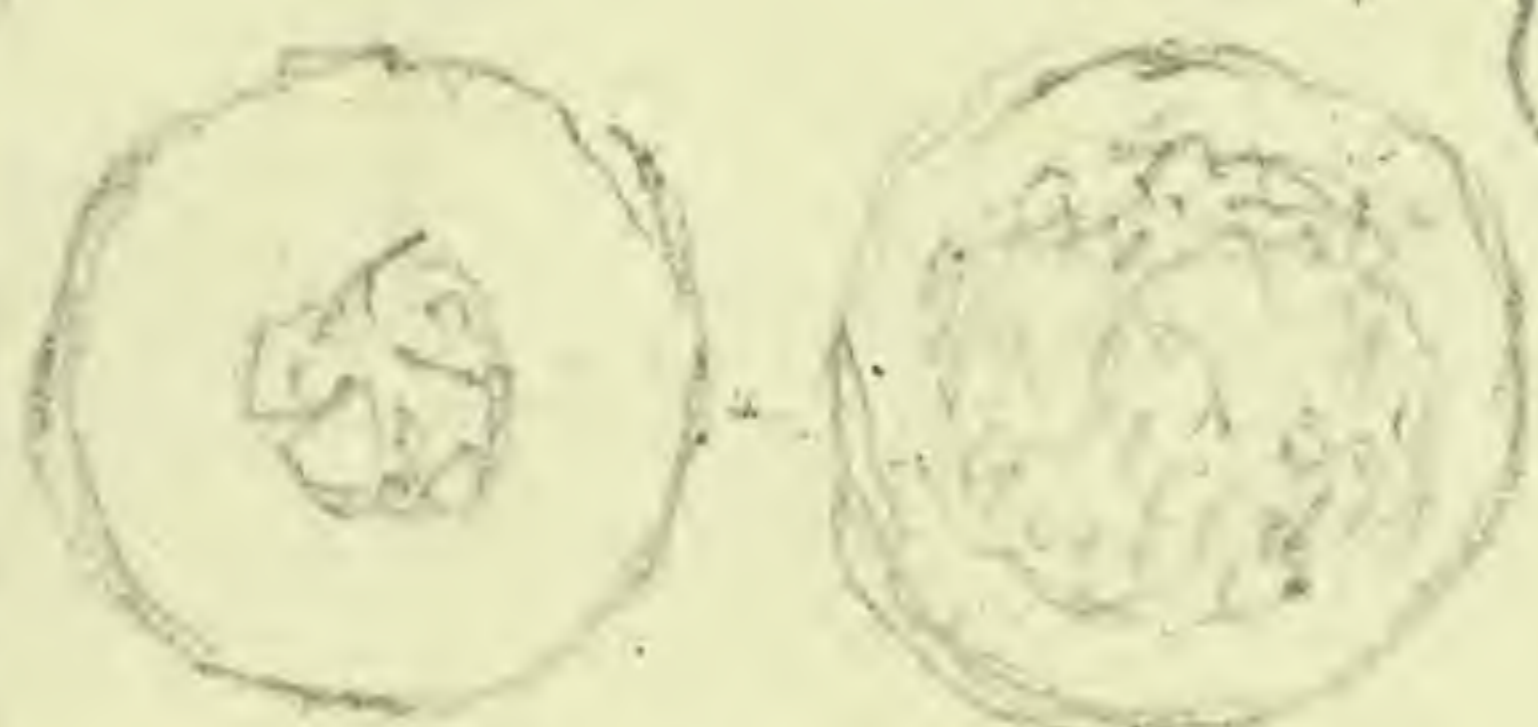


bud of amount x10

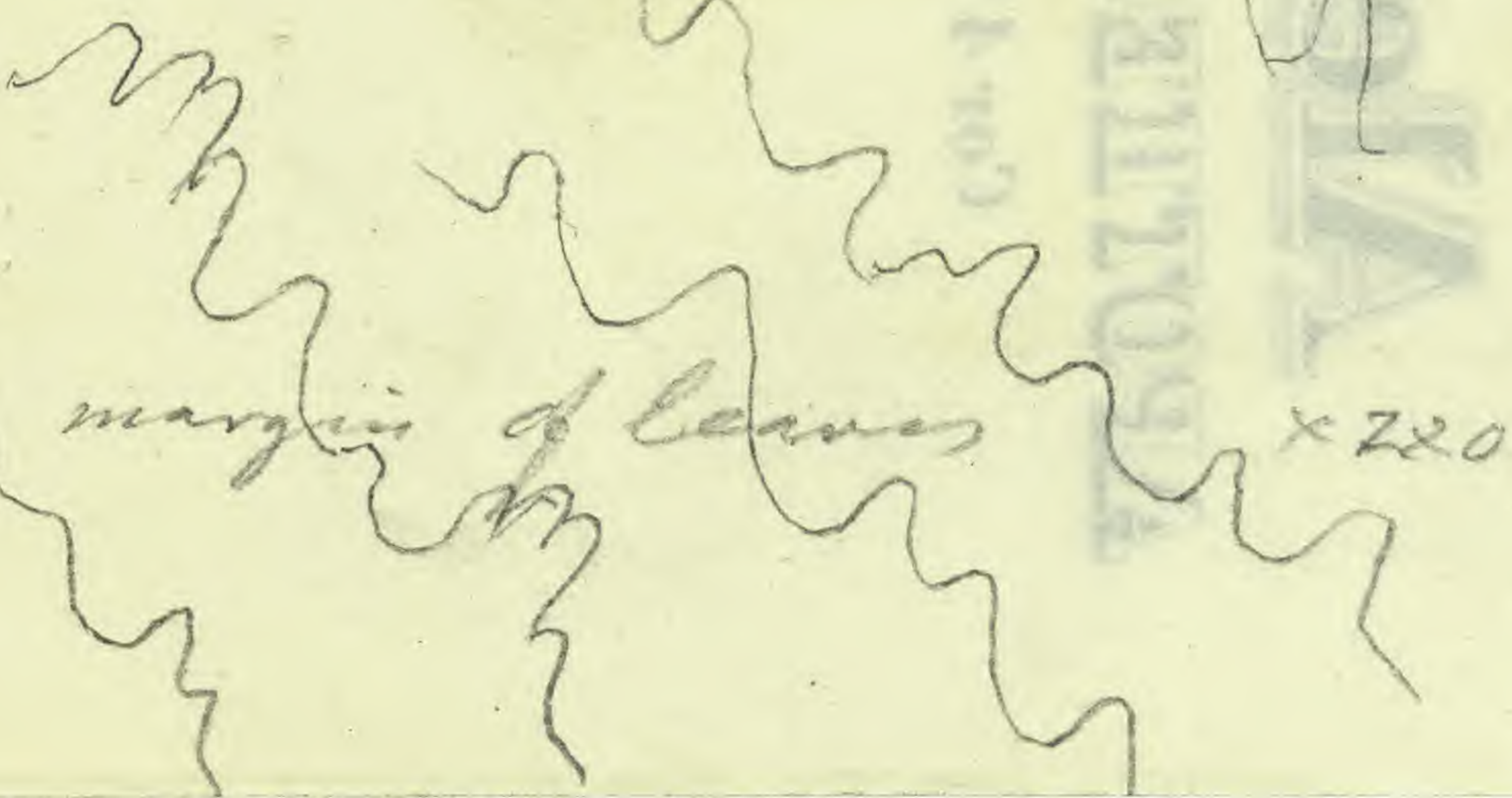
Samaras always terminal on long branchlets 1/2 - 1 inch long



tip of scale x220



Pollen x415



margin of leaves x220



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI BOTANICAL GARDEN

**Alex. Leitch,**  
**APOTHECARY & CHEMIST,**

Cor 4<sup>th</sup> & Olive Sts. St. Louis.

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

18178



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

*Juniperus utchensis*

May 2 1874

St George, Utah, Dr Parry April 22<sup>nd</sup>

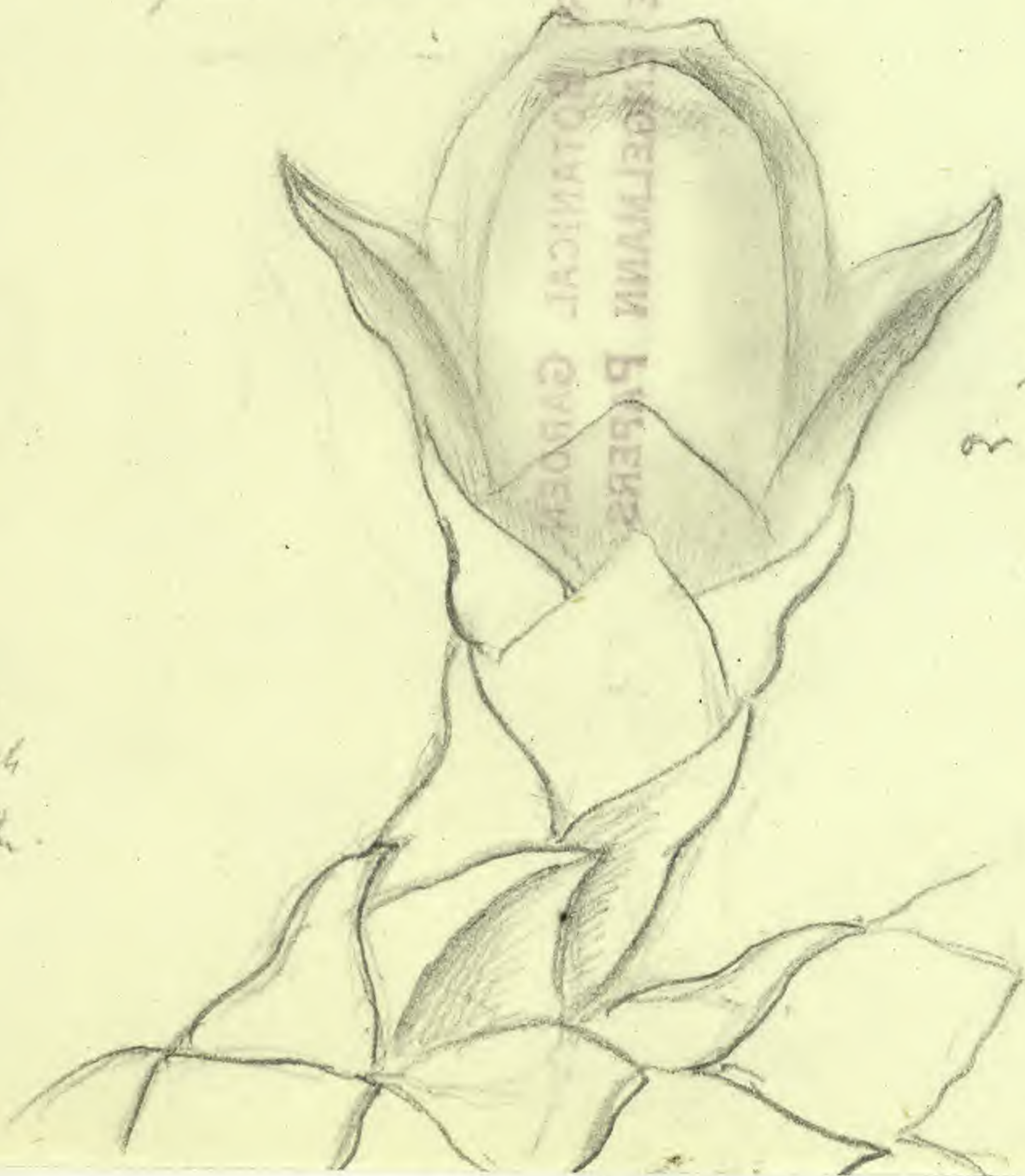
x10



prop section through  
branch, showing the  
oil vesicles in  
each leaf



fruit scales - 2 rarely - 3



female flower x10  
or rather young fruit  
purple - brown



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



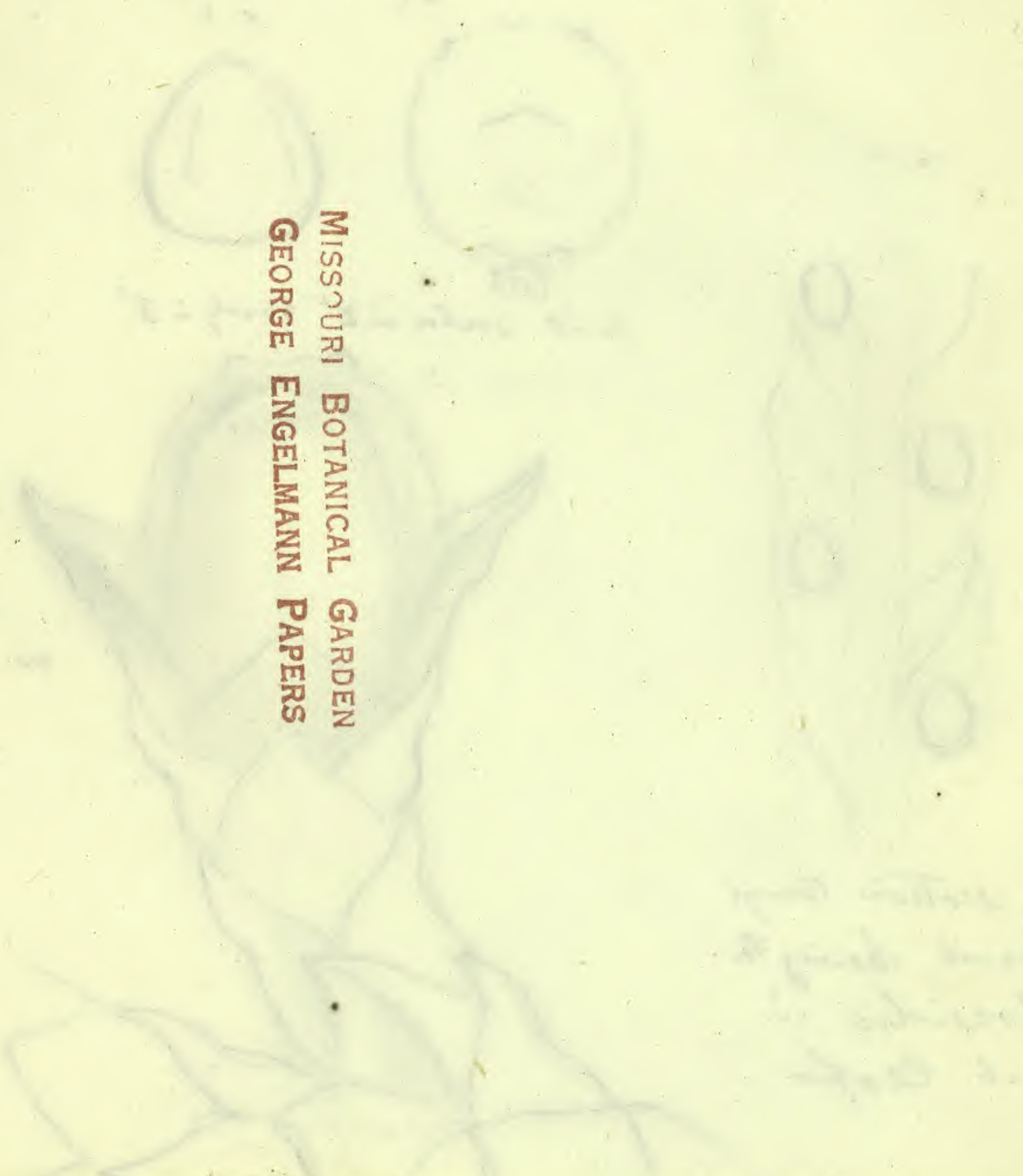
MISSOURI  
BOTANICAL  
GARDEN



**ALEX. LEITCH,**  
**APOTHECARY & CHEMIST,**  
 Cor. 4th and Olive Sts., St. Louis.



MISSOURI BOTANICAL GARDEN  
 GEORGE ENGELMANN PAPERS



13179



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

  
 MISSOURI  
 BOTANICAL  
 GARDEN

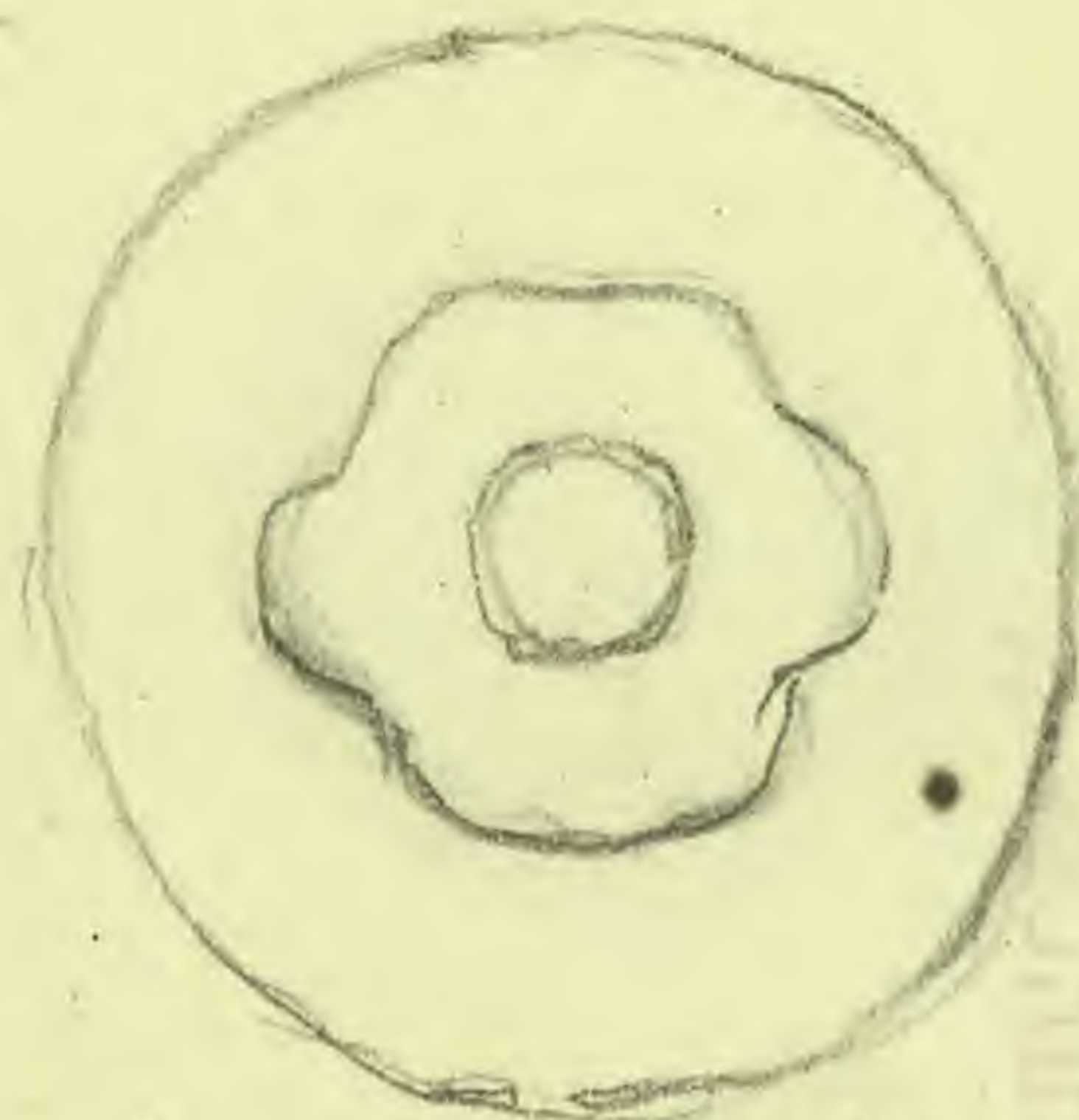
8. *Junciopsis*

March 3<sup>d</sup> 1874

Camp Apache Arizona Jan. 1874 J. J. Girard



5 scales = pairs



sect



seed x2



x2



sect of embryo

x10



5 Cotyledons



0 1 2 3 4 5 6 7 8 9 10

cm

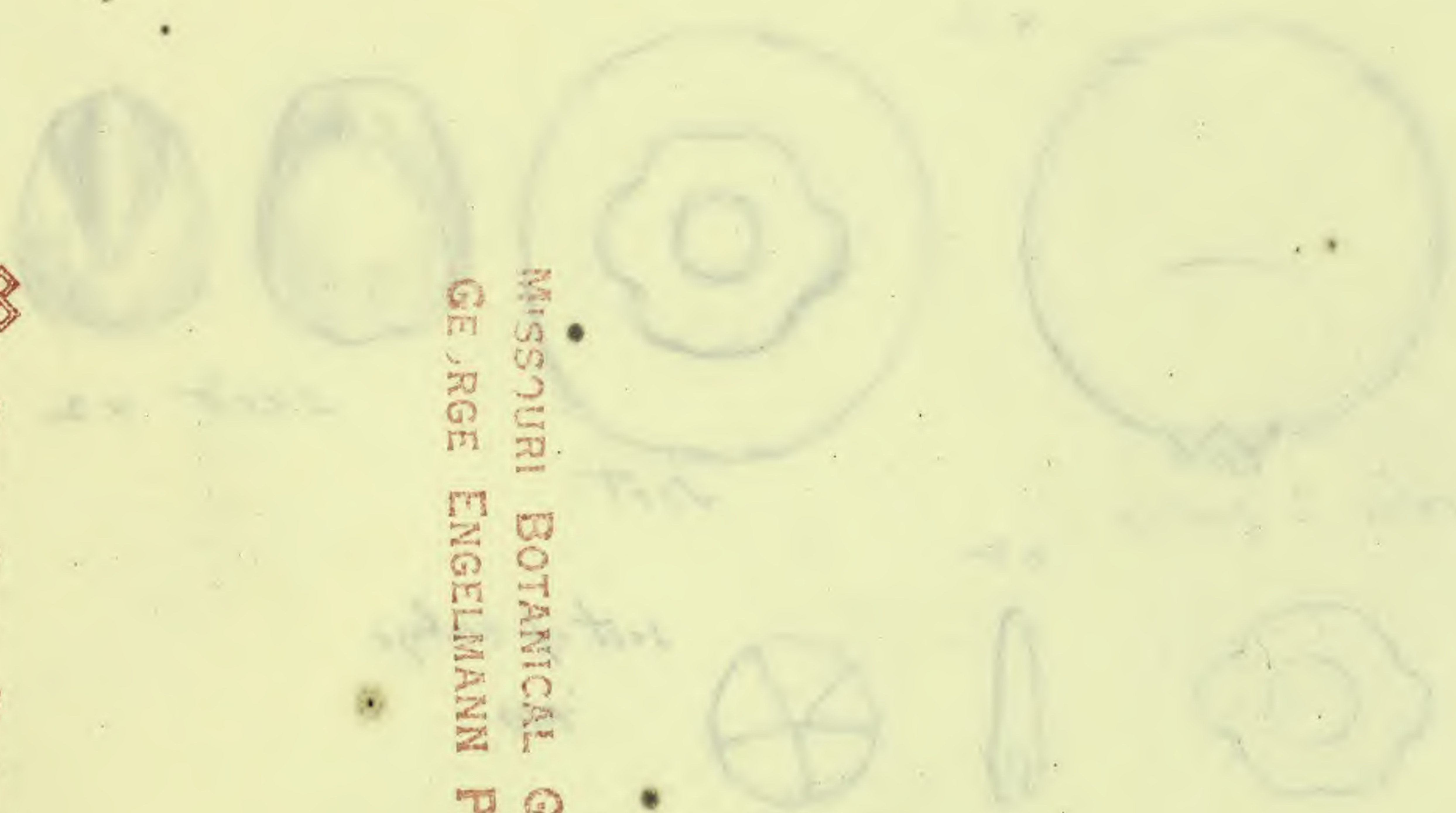
copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

ALEX. LEITCH,  
APOTHECARY & PHARMACEUTIST,  
Corner 4th & Olive Streets, St. Louis.

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



13180



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

8 *Twiniparus*

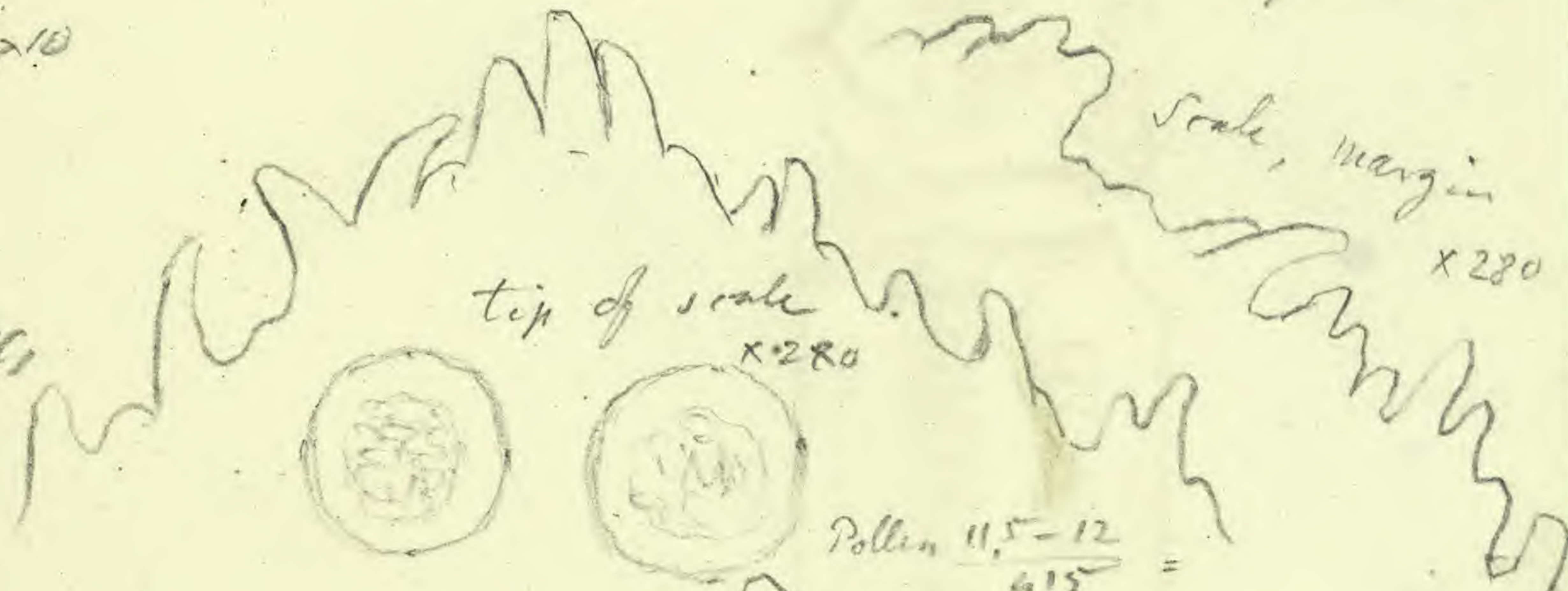
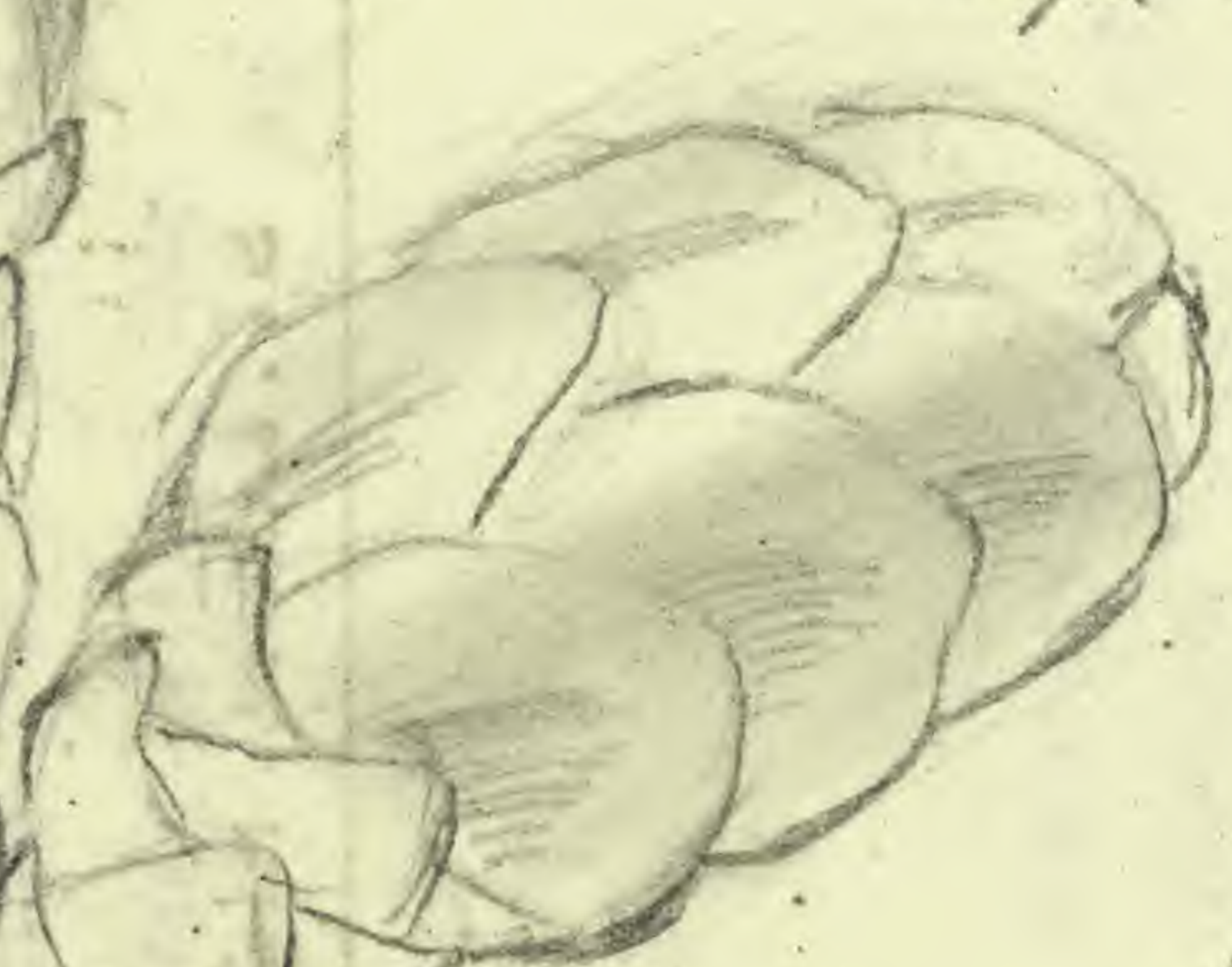
March 4 1874

Camp Apache, Arizona, Jan 1874 D J B Prard



x10

only 4 cells



Scale, margin

x280

tip of scale

x280



Pollen  $\frac{11.5-12}{4.5} =$

top of leaf

x60

top of leaf

x280

aments 4 angular  
angles on the sides of scales  
scales not crenate but depressed in middle



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN



13181

*Deutsche Apotheke.*

HENRY DIERS,

**APOTHECARY,**

South East Corner Fifth and Biddle Streets,  
ST. LOUIS, MO.

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

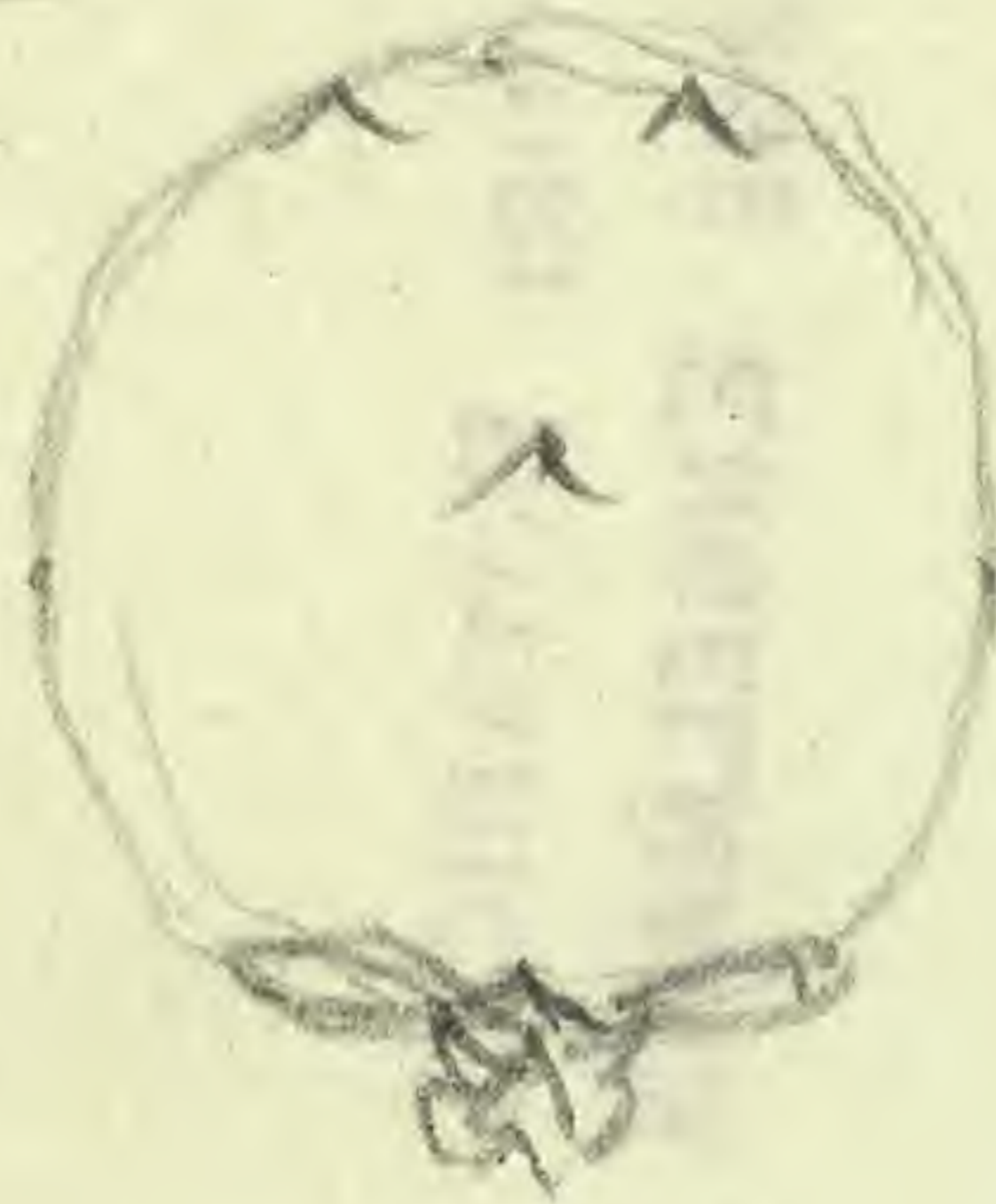
"*J. Canosianus* Kellogg"

Jan 18 1876

Canos Island, Calif., Dr Kellogg det., - Hb. Torrey



x 2



seeds 2

scaly, leaves always 3  
lower surface of fruit  
or uppermost bracts large  
circular flower, all sp  
exposed - no other seen

all with 3' or 3'



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

R. C. HARRISON,

508 Leffingwell Avenue,

Druggist & Apothecary

MISSOURI BOTANICAL GARDEN  
GEORGE ENGELMANN PAPERS

G. F. ENGLEMAN, M.D.,  
3003 LOCUST STREET.

13182



0 1 2 3 4 5 6 7 8 9 10

cm

copyright reserved



MISSOURI  
BOTANICAL  
GARDEN

Description d'une nouvelle espèce de Genévrier

*Juniperus Californica*, Carr.

Ramilles adultes subcylindriques, entièrement recouvertes de  
feuilles squamiformes, courtes, très-rapprochées et étroitement  
imbriquées. - Gabbules solitaires, subsessiles ou portés sur des  
ramilles fructifères très-courtes, presque globuleux ou ovales,  
souvent légèrement atténués aux deux bouts, mais un peu  
plus au sommet, long d'à peu près 0.012 à 0.013, larges de  
0.010-0.011 à peu près, lisses ou légèrement tuberculeux vers la  
partie supérieure, aux points correspondants à la soudure des  
écailles, recouverts, même assez longtemps avant la ma-  
turation, d'une poussière glauque, renfermant à l'intérieur un noyau  
extrêmement dur, exactement de même forme que le gabbule lui-même  
; loge unique, renfermant une seule graine dressée.

Cette espèce, récemment découverte en Californie par M. Bonnier  
de la Rivière, présente des particularités assez remarquables sous le  
rapport de ses habitudes. Elle occupe une localité à peu près de même

-vue de toute autre espèce de Conifères; elle y forme un groupe  
d'environ 50 individus, croissant au sommet d'une montagne  
escarpée, entre les fissures des rochers de schistes talquens, à  
reflets verts et brillants. Ce sommet nu, qui domine une profonde  
vallée, est à environ 300 mètres au-dessus du niveau de la mer, et est  
exposé à des vents très-violents. Cependant, même dans ces  
mauvaises conditions, le *Juniperus* atteint 10-12 mètres de hauteur, et  
son tronc acquiert 40-50 cm de diamètre; mais il est bifurqué souvent  
à peu de distance du sol, et alors les branches sont aussi grosses que  
le tronc principal, et s'élèvent verticalement en jetant de nombreuses  
branches secondaires. L'ensemble de l'arbre forme une  
belle masse, car il a deux ou trois sommets de



Fig. 21. - *Juniperus Californica*.

Fruit coupé longitudinalement.

A. Partie charnue du gabbule.

B. Noyau.

C. Coque.

GEORGE ENGELMANN PAPERS  
MISSOURI BOTANICAL GARDEN

Revue Horticole, Tome III. 352, 353. (1854.)  
13183



