



MISSOURI BOTANICAL GARDEN
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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.

Abies excelsa

Nov 1862

Cambridge Bot Garden



x2



x2



x10

6 Cotyled

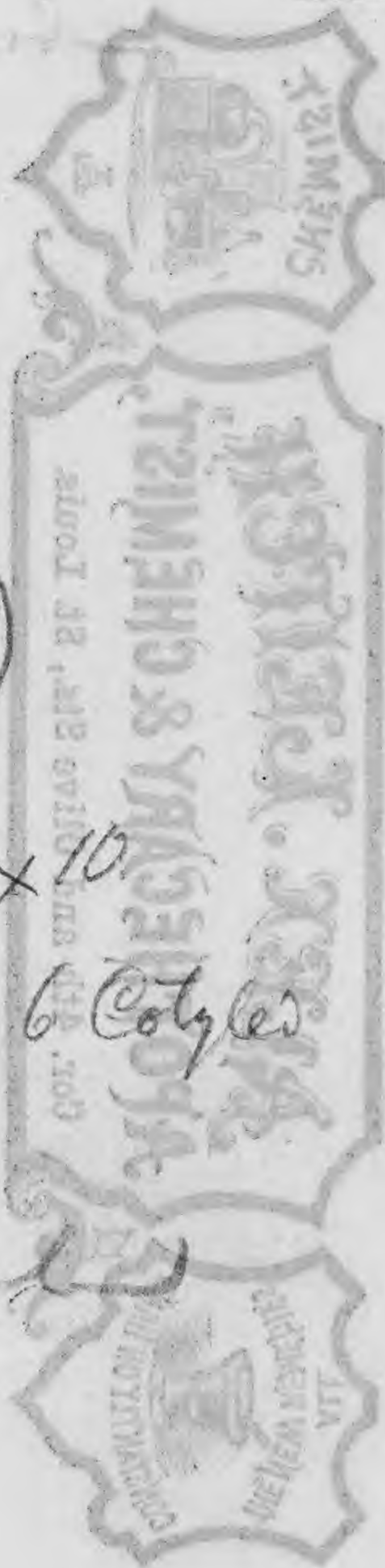
Cambridge Bot Garden

above

Handeck falls

Switzerland

Cones $\frac{13}{21}$



0 1 2 3 4 5 6 7 8 9 10

cm

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MISSOURI
BOTANICAL
GARDEN

12506

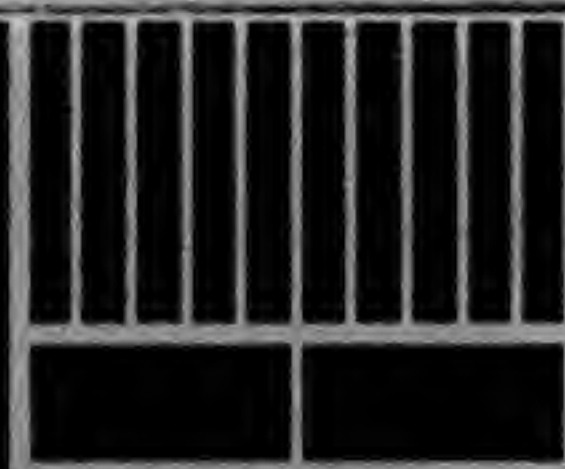


ALEX. LEITCH,
APOTHECARY & CHEMIST,
Cor. 4th and Olive Sts., St. Louis.



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[Faint, illegible handwritten notes and sketches of botanical specimens.]



0 1 2 3 4 5 6 7 8 9 10

cm

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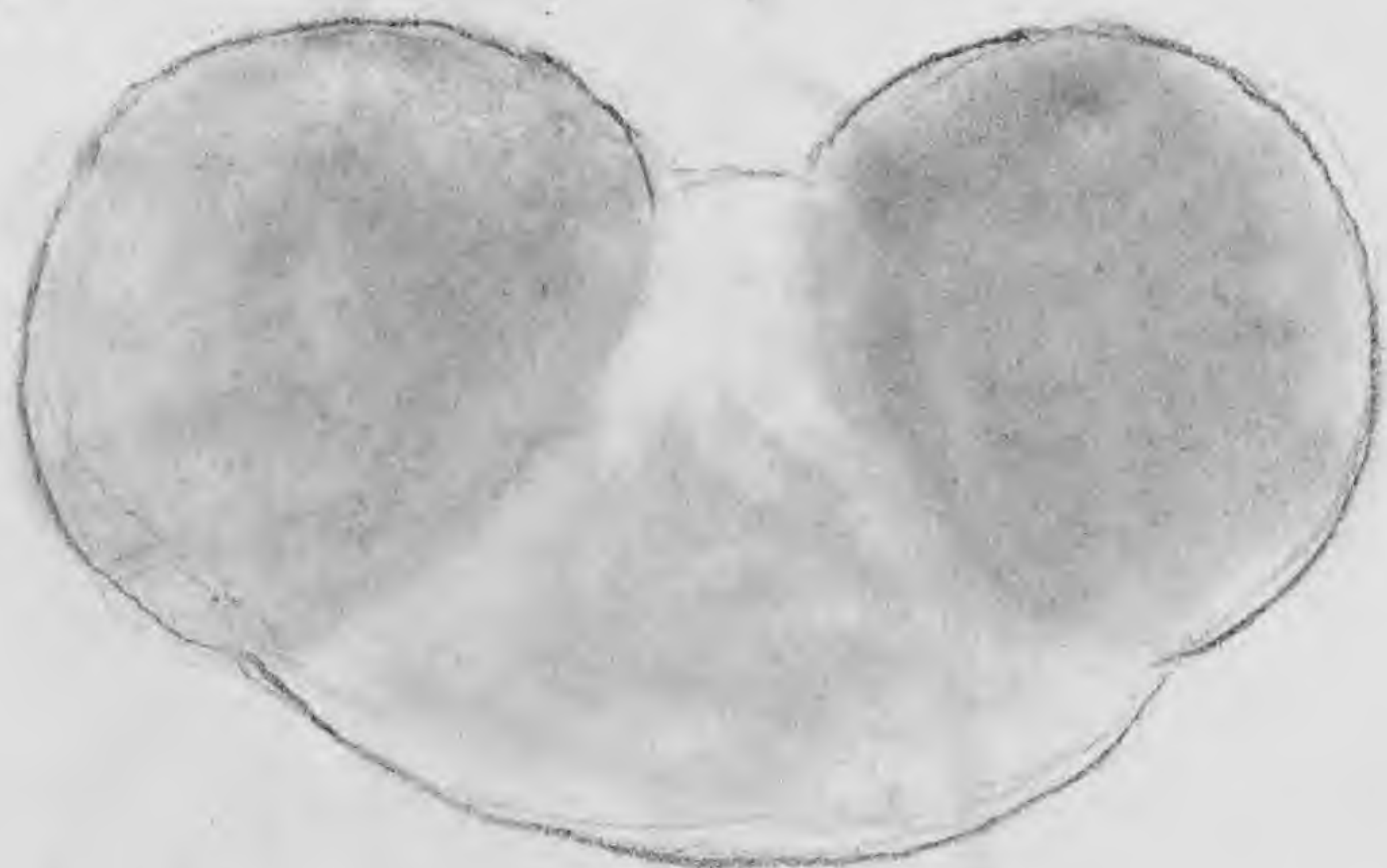
Abies excelsa

Dec 1862

Frankf. 1826

0.055

x415



x10

Connective narrow!
always?



0 1 2 3 4 5 6 7 8 9 10

cm

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12507

CHEMIST

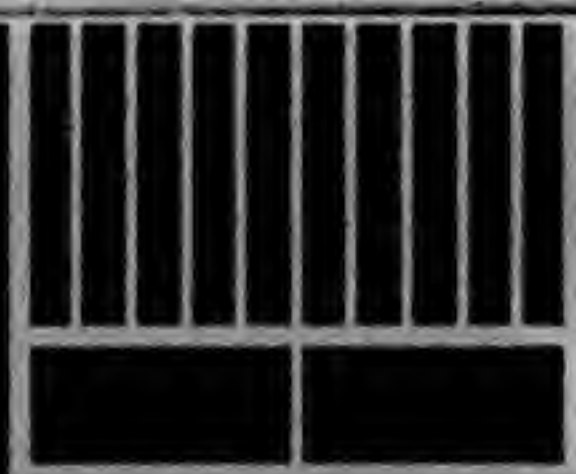


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APOTHECARY & CHEMIST,
 Cor. 4th and Olive Sts., St. Louis.

ALL THE NEW REMEDIES
 CONSTANTLY ON HAND



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cm

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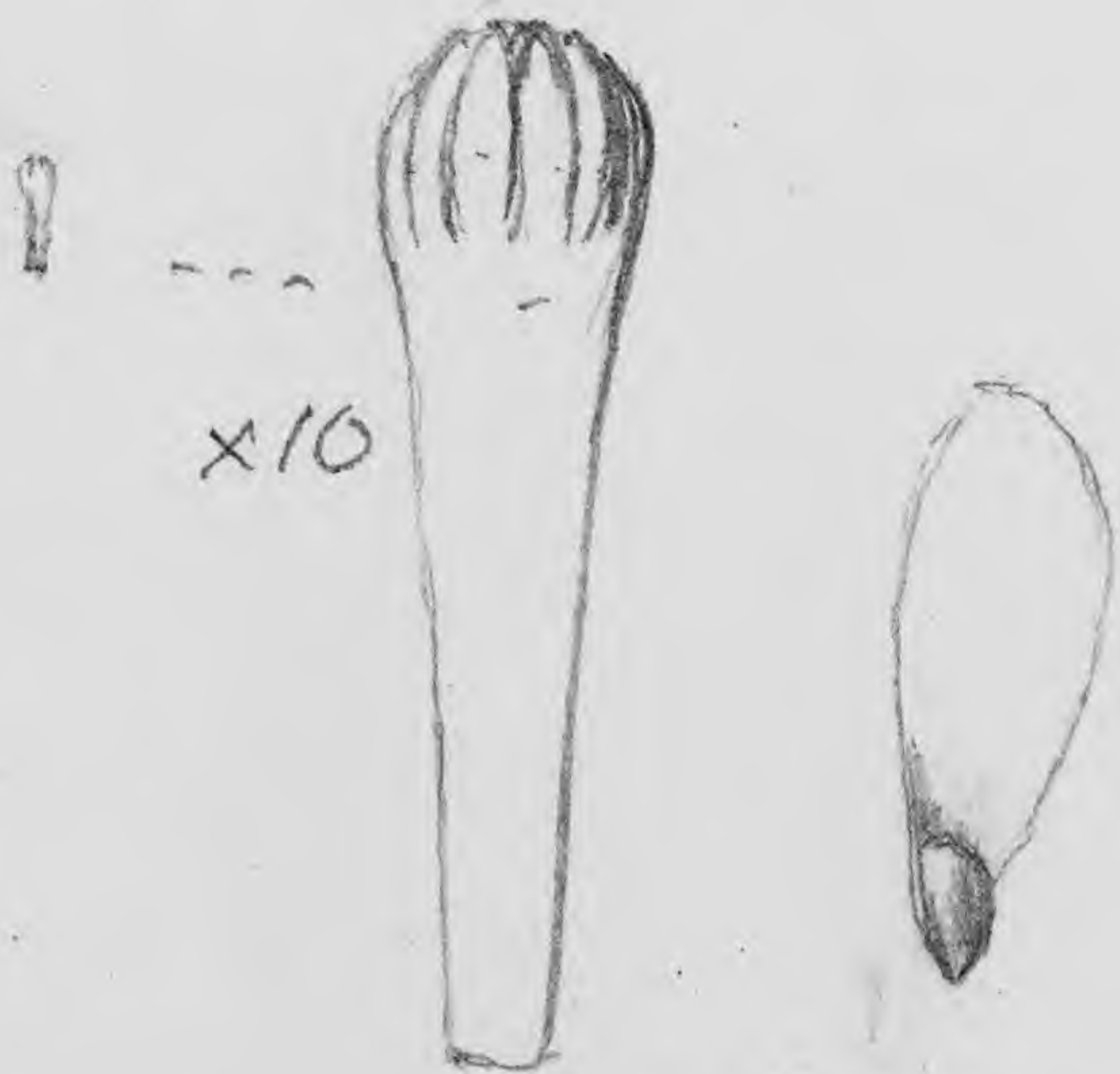
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Abies excelsa

var *macrocarpa*

Hort Neapol

Nov 1862



9 acute cotyled.
in both seeds
examined.



x10

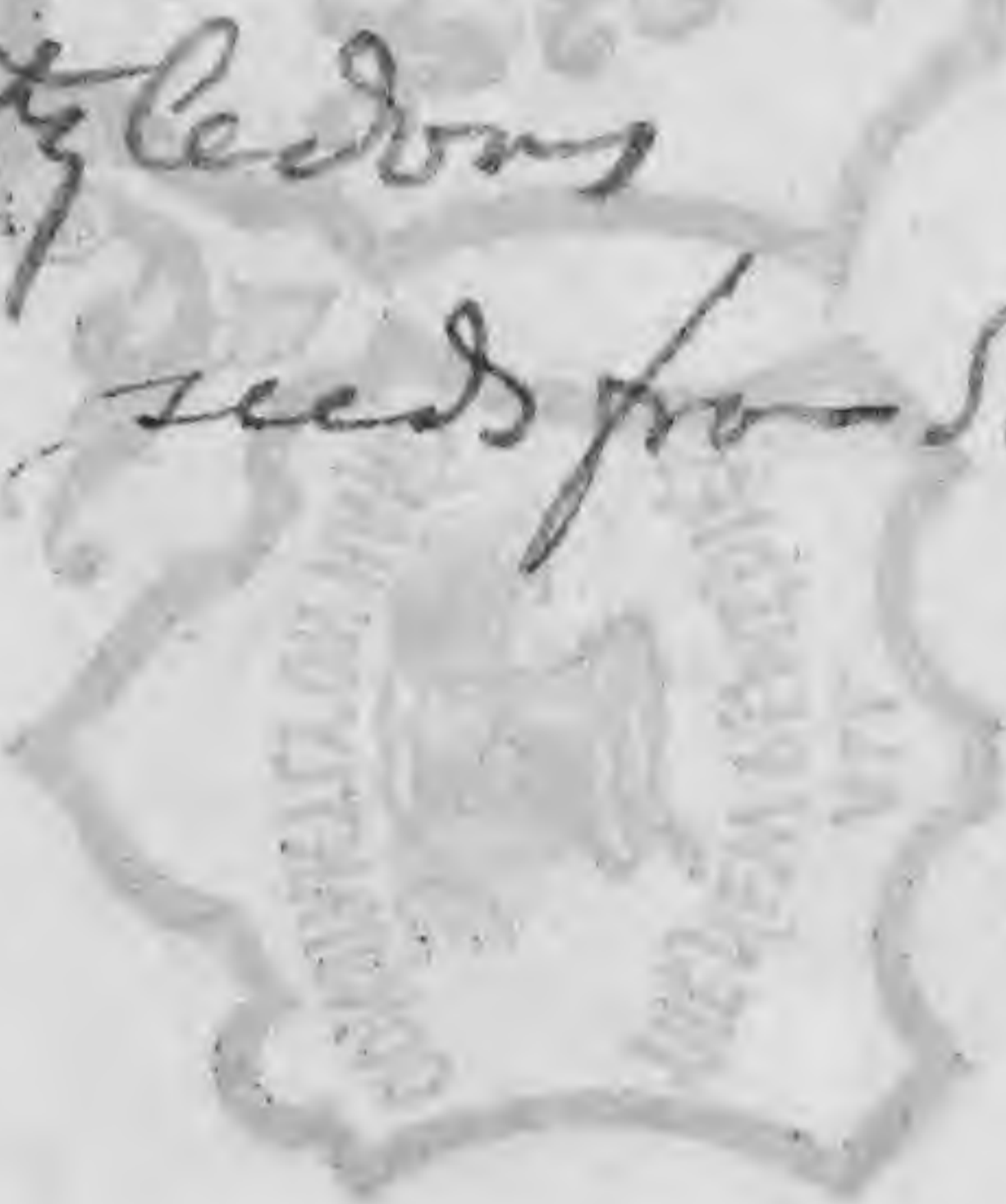


Abies excelsa

Verriere ?
& Greenland

8 Cotyled
rarely 9.

8 Cotyledons
in seeds from Scotland



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cm

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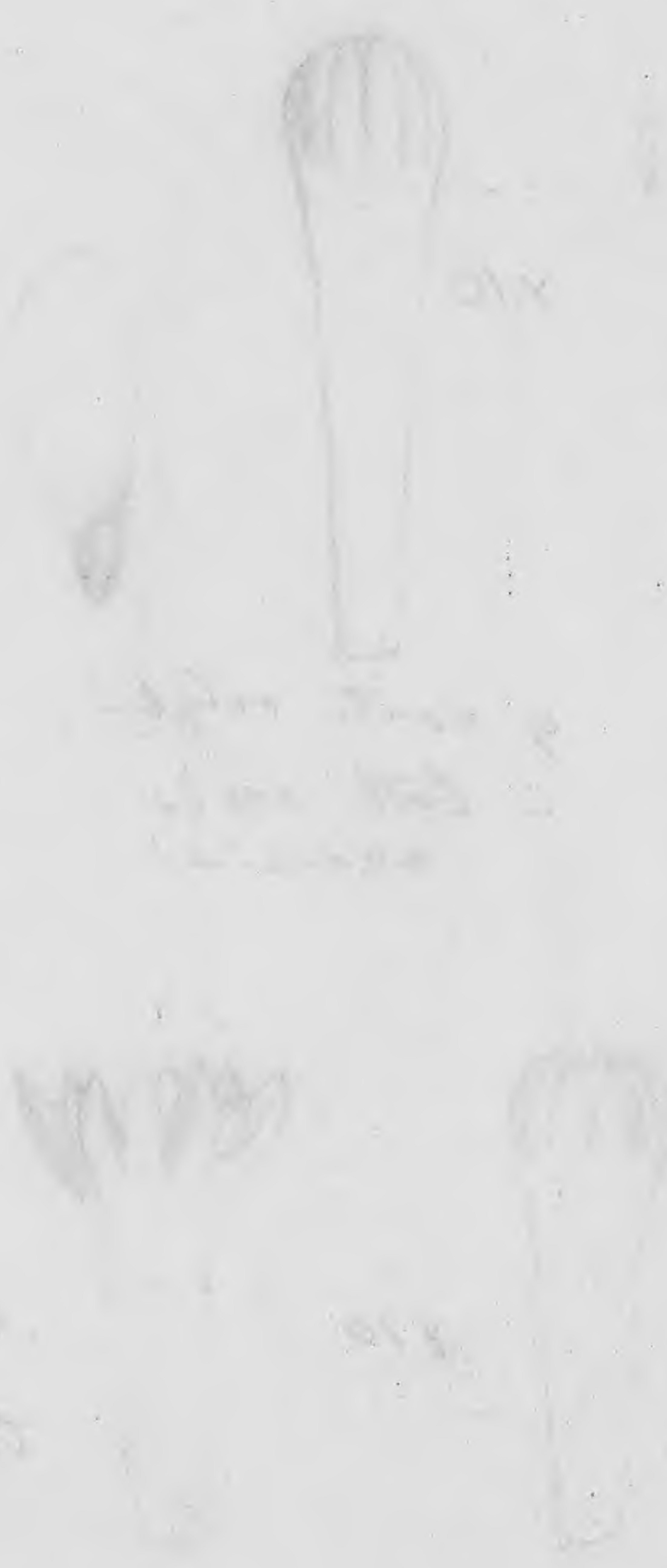
12508



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cm

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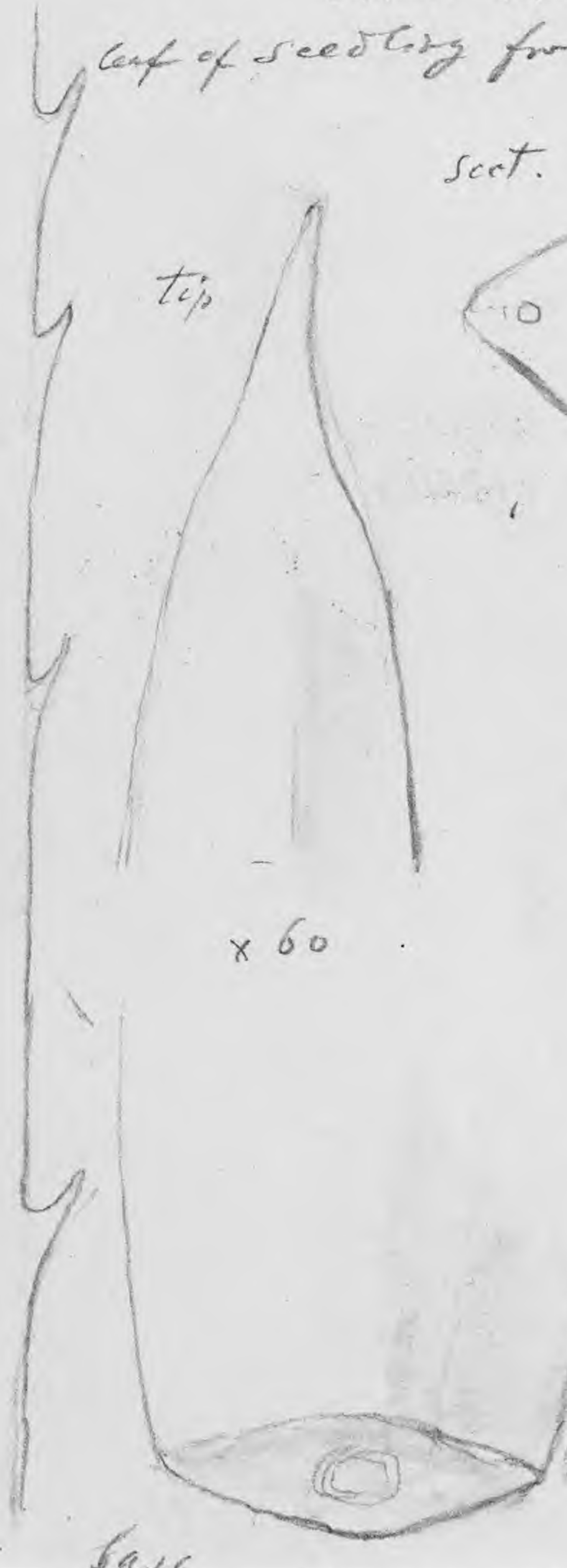
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Picea excelsa

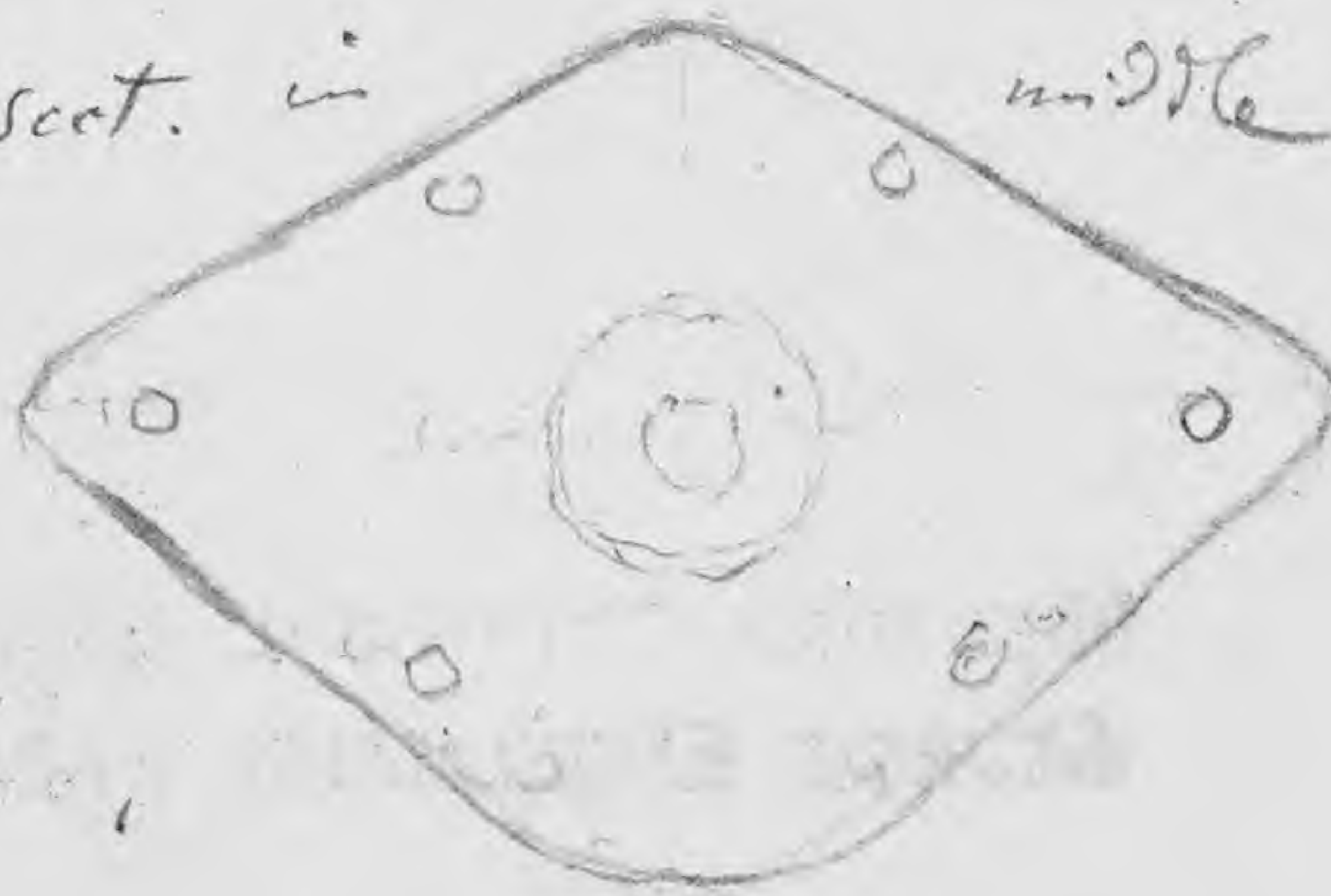
26 April 1862

leaf of seedling from the woods of Tricot, Switzerland.

x60



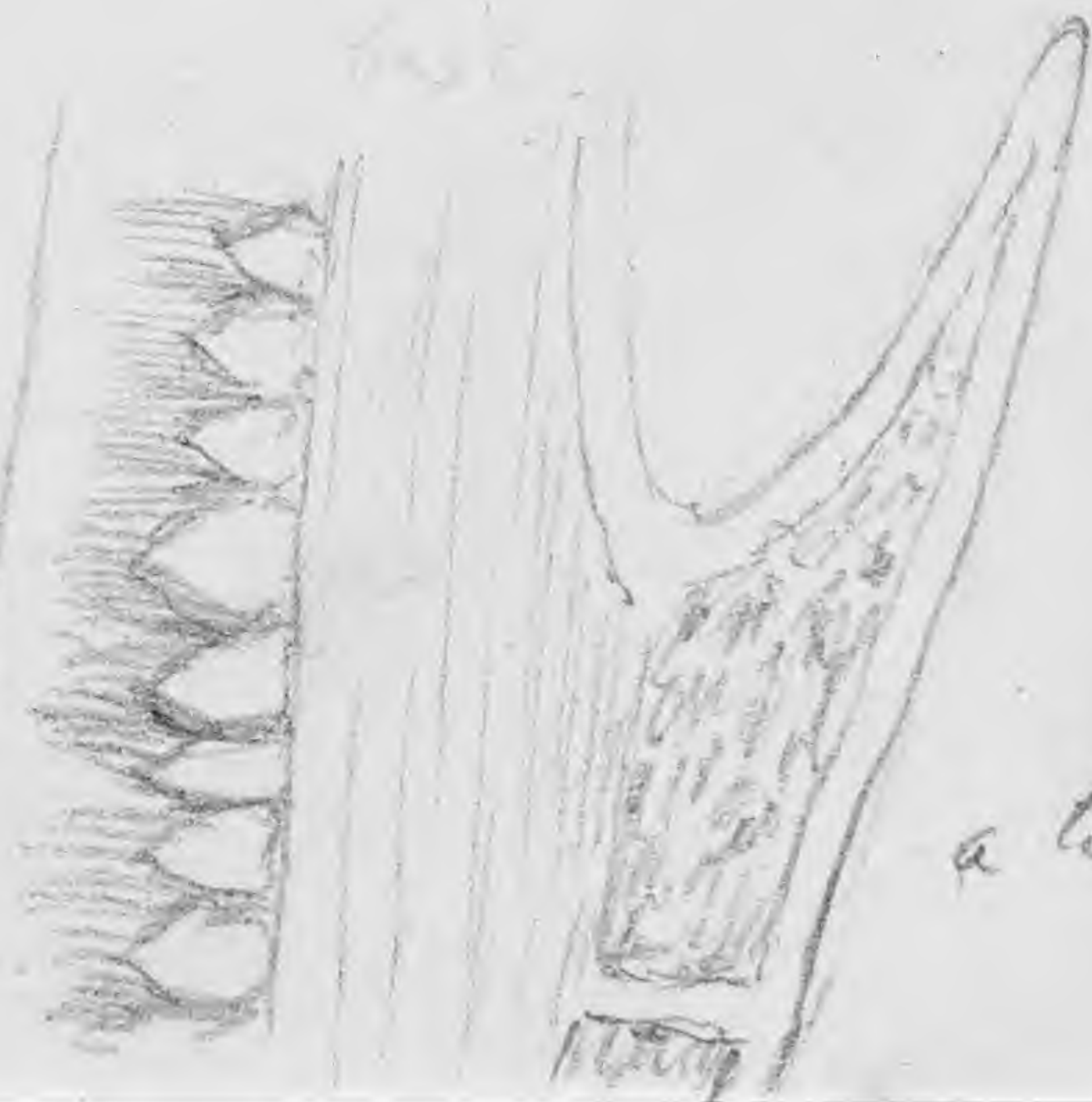
sect. in middle



base



x60



a tooth and adjoining tissue

x280



0 1 2 3 4 5 6 7 8 9 10

cm

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12509

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JONES & LETTICH
Druggists
 Cor. Fifth & Market Sts. ST. LOUIS, MO.

J. McKittrick & Co. 65 N. Main St.



0 1 2 3 4 5 6 7 8 9 10

cm

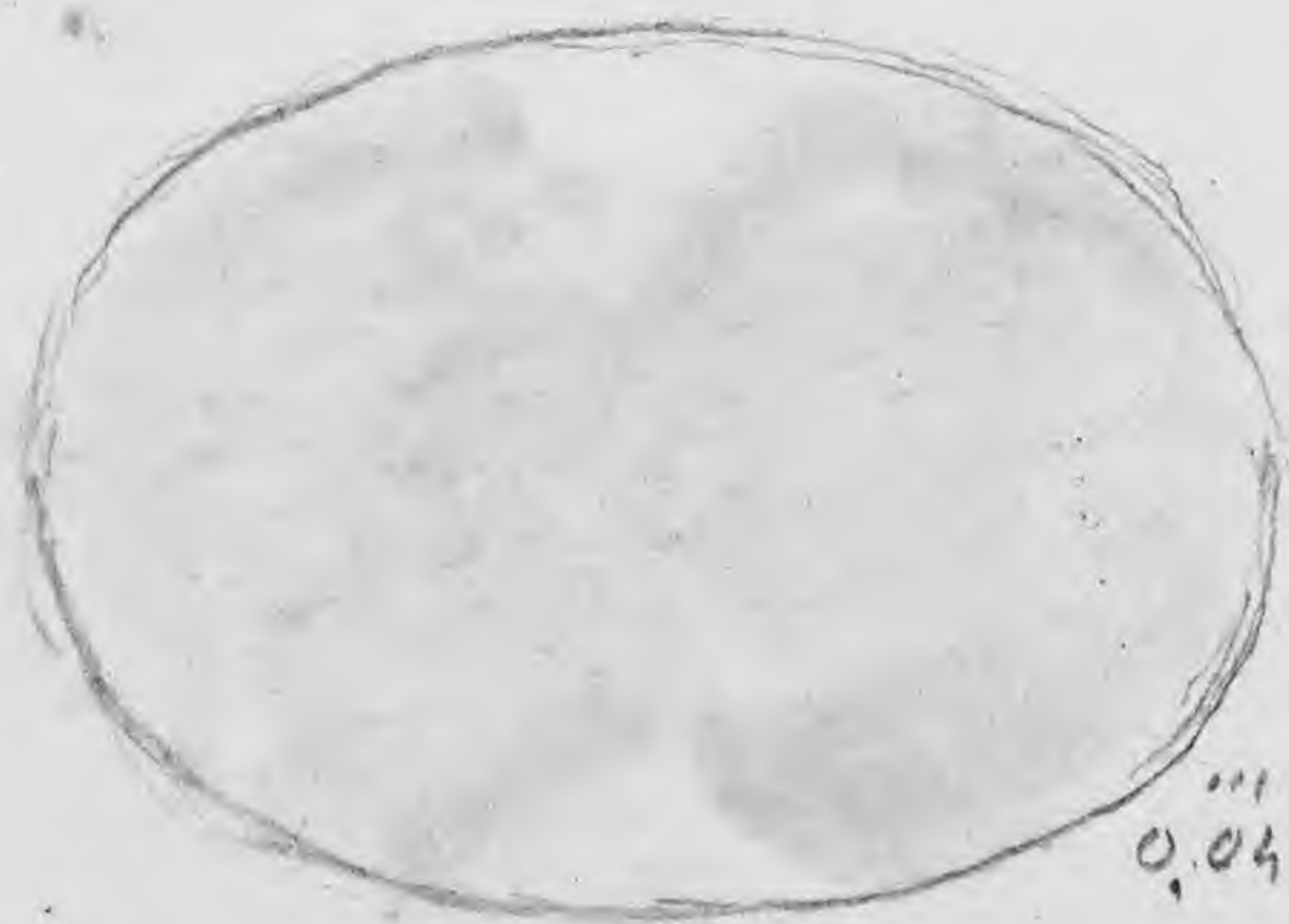
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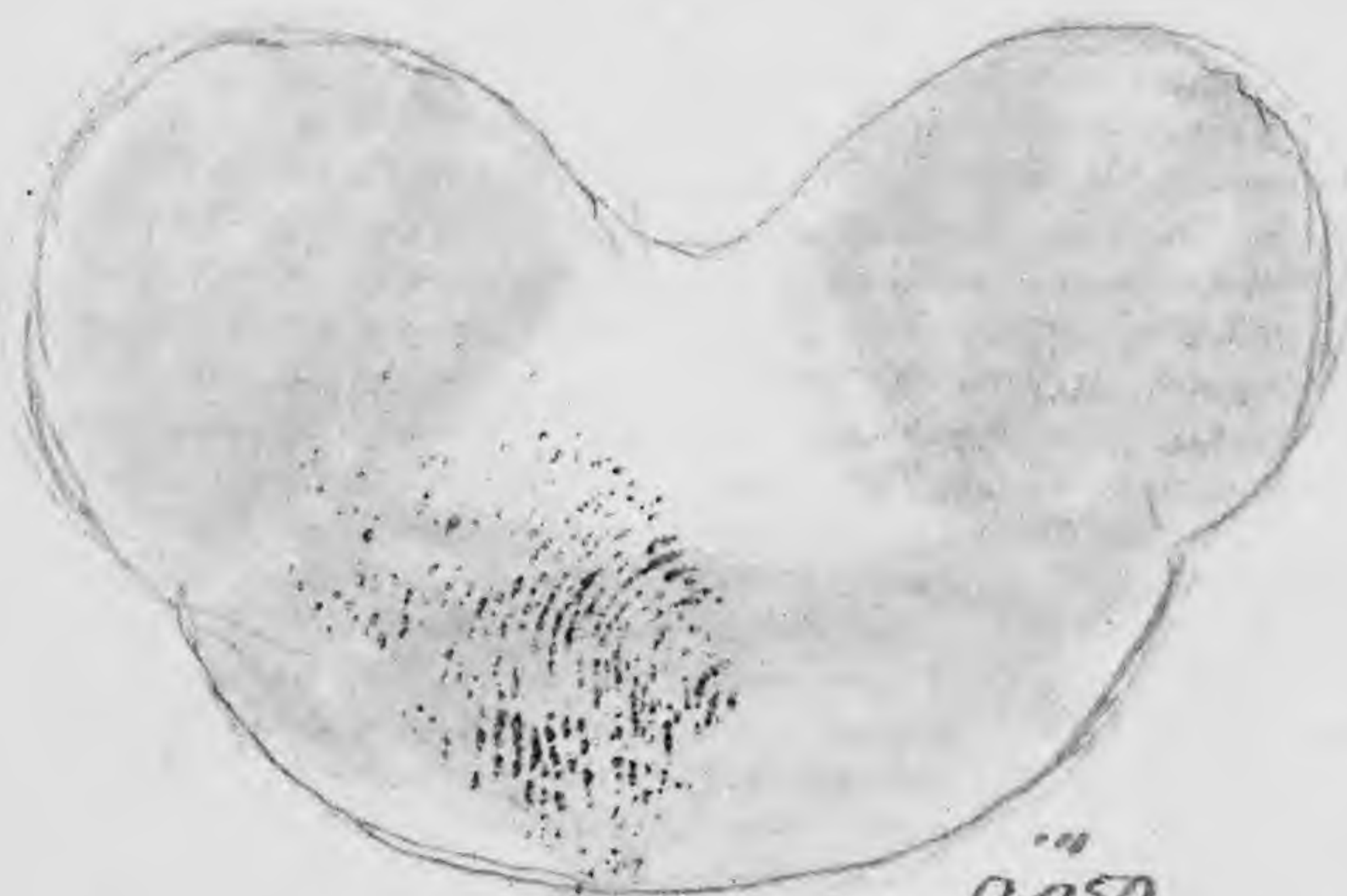
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Picea excelsa

June 1st 1863



0.048



0.050

milwaukee



0.050



0.053

Cambridge

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1863



0 1 2 3 4 5 6 7 8 9 10

cm

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M. W. ALEXANDER,

SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,
ST. LOUIS.

415
2000
1660
3400

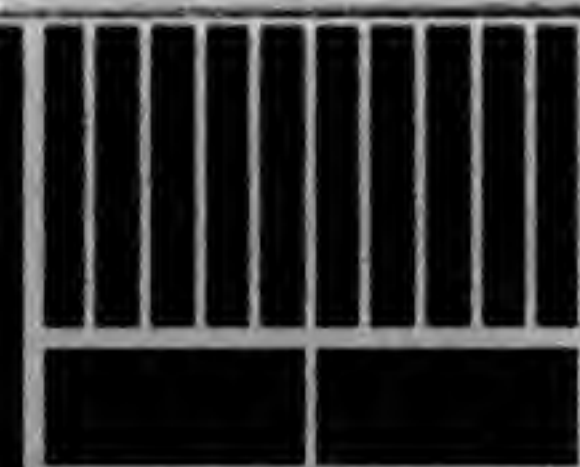
48
2100
2075
250

50
2200
2075
1250

53

12510

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0 1 2 3 4 5 6 7 8 9 10

cm

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Picea excelsa

April 13 1871

Hot Bot. Missouri Apr 12

lower & lateral

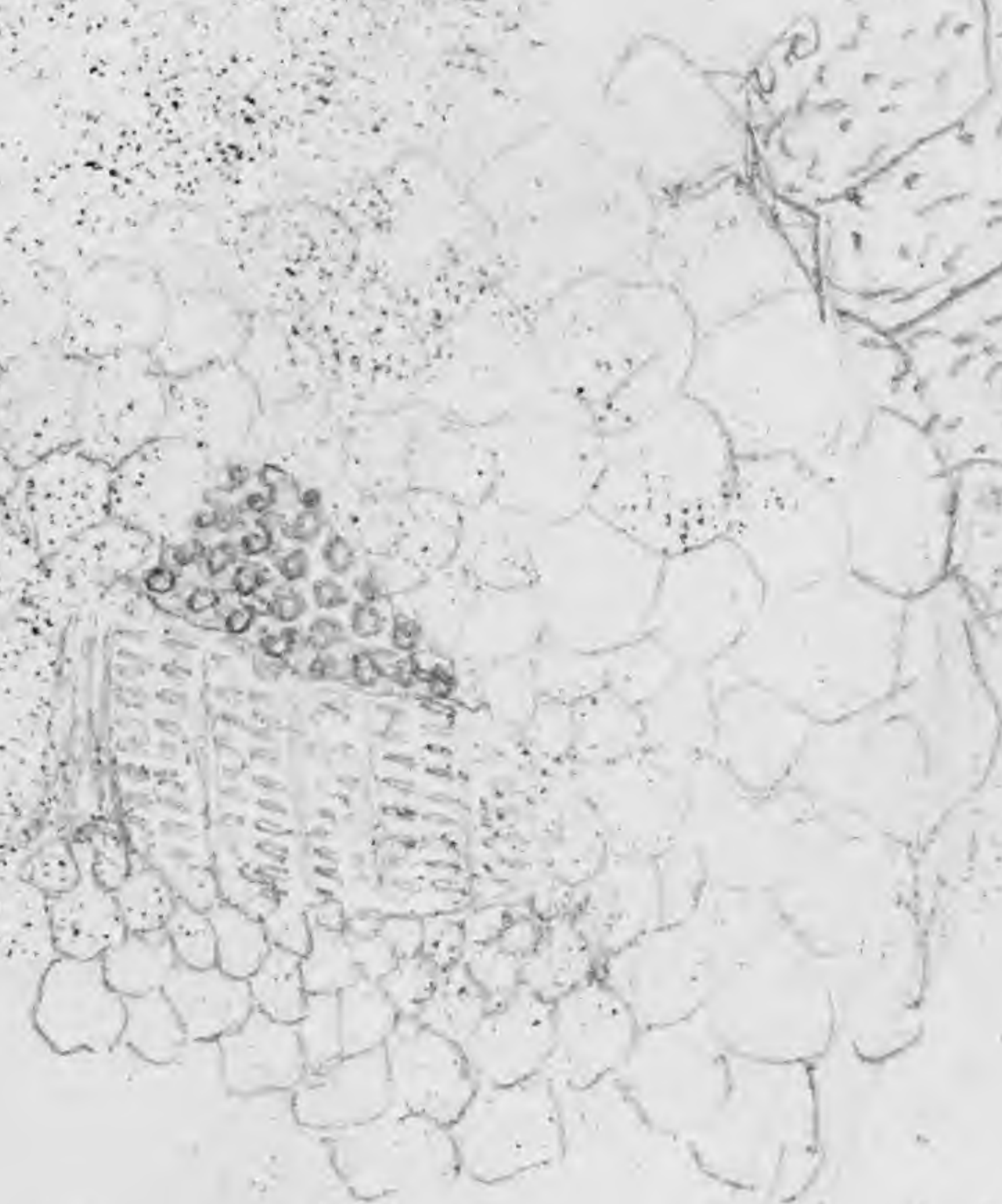
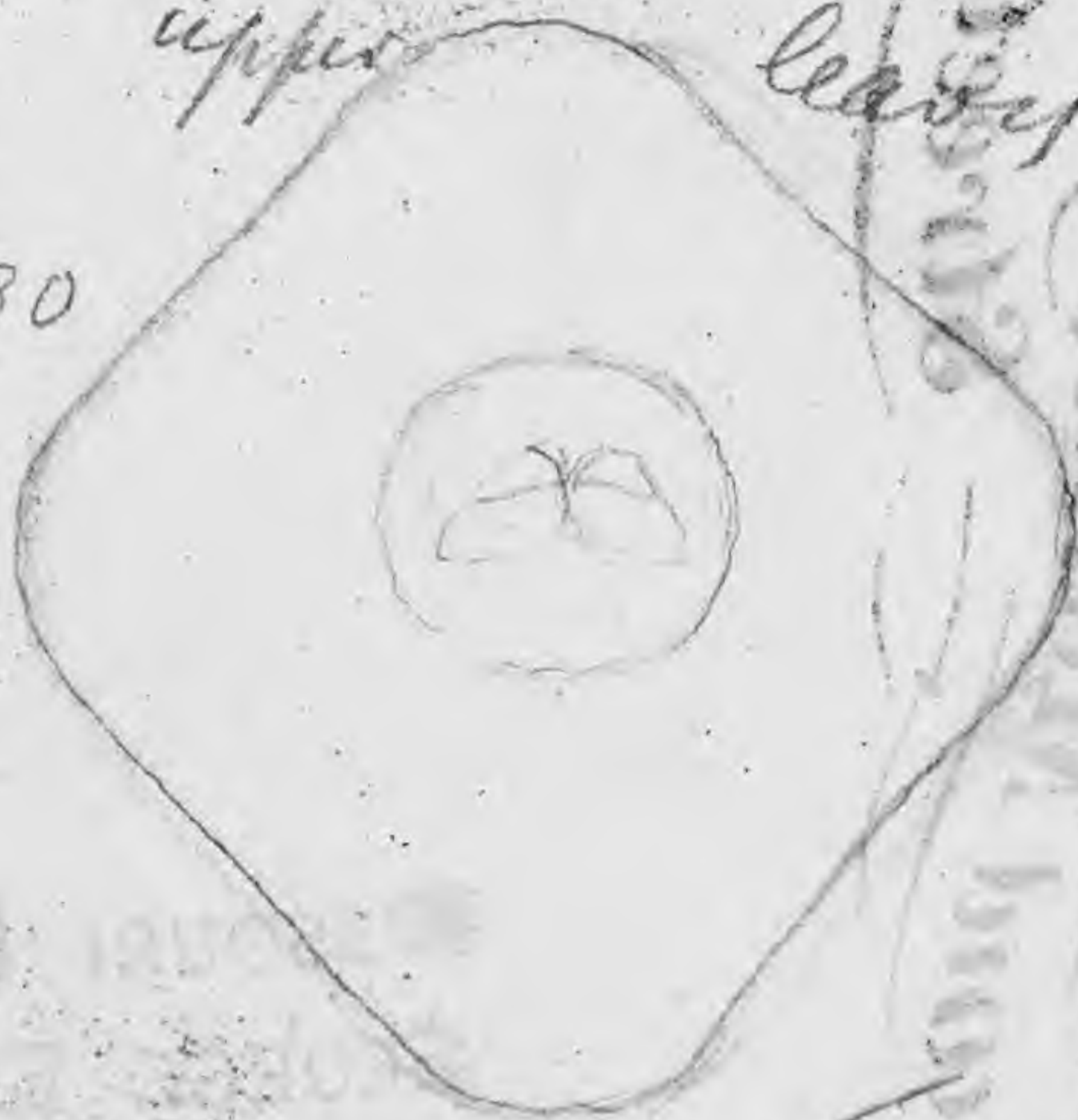
upper

leaves of same branch

X 30

X 30

leaves on
upper side
of horizontal
branch square,
on lower side
and lateral
laterally
compressed



Perfectly
square
laterally
compressed



0 1 2 3 4 5 6 7 8 9 10

cm

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12511

Leitch & Corlies

CORUGANS'S

South West
Corner Fifth
and Market
Streets

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0 1 2 3 4 5 6 7 8 9 10

cm

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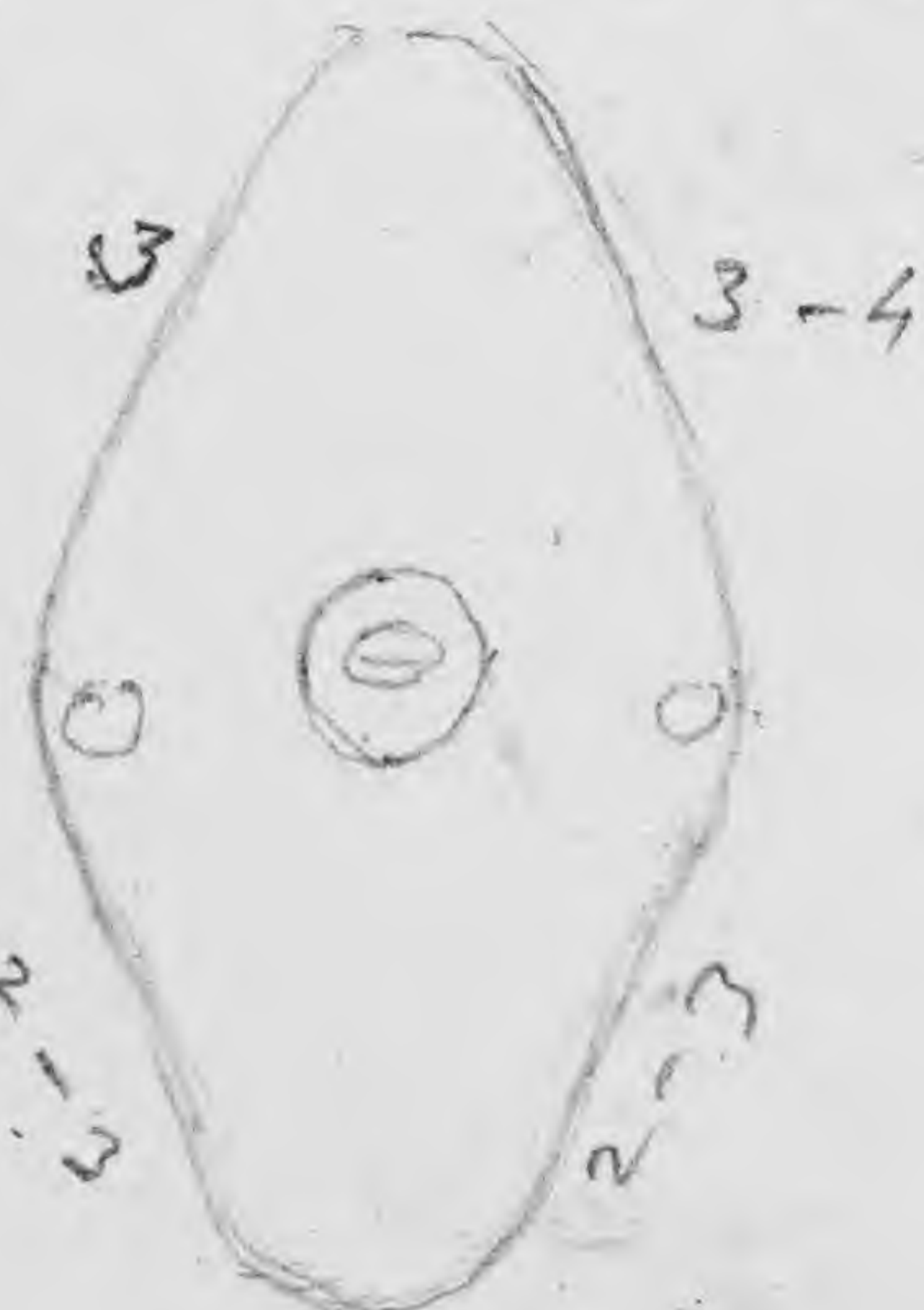
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Pinus excelsa

July 4 1878

H. B. Mission July 29

x 30



upper half

lower half
of leaf

Pinus excelsa
Compressa

stomata 2 rarely 3 rows
on both lower sides
or 2-3 on all 4 sides
3, rarely 4 rows
on both upper sides

leaves certainly some-
what distichous, twigs
crowding the upper, and
turning of the apparently
denudate lower surface
of a branch

Thickness of leaf to width 33 ÷ 22

37 ÷ 21

about 3 : 2



0 1 2 3 4 5 6 7 8 9 10

cm

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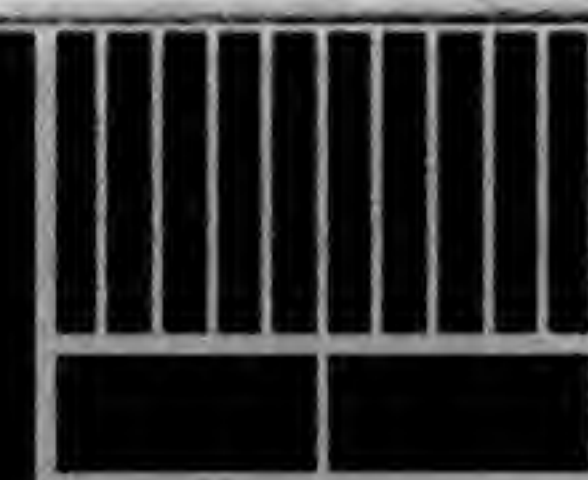
**ARTHUR T. HOLLISTER,
Druggist,**

301 South Fifth, S. W. Cor. 5th & Myrtle, St. Louis, Mo.

R

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12512



0
cm

1

2

3

4

5

6

7

8

9

10

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332
320
353
106
-335

437
562
663
1662
854

Dr Engelmann
To Sir

When you come to the
Garden - you will find

Dammara Australis
in bloom - which will perhaps
be of interest

Yours truly
Henry Shaw

I have
No. 2210



0 1 2 3 4 5 6 7 8 9 10

cm

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Picea Omorica

12513

branches pubescent
 buds conical acute, brown; thin scales lanceolate, acute, ^{aristate} but not
 leaves on erect ~~fertile~~ ~~branch~~ flattened, dark shining green on
 the upper side, rarely with a few, mostly without any
 stomata; with 2 broad bands (6-8 lines each) of stomata
 on the upper side; ligular base very short ^{and comparatively thicker}
 On the sterile shoots leaves a little narrower ^{and comparatively thicker} obtuse, tipped,
 with a very short mucro - forming a flat spray
 green above, white below.
 On the fertile, especially the erect shoots, the leaves
 are broader, abruptly acuminate.

Cones (ovoid-oblong, peduncled) acute, 1/2 - over 2 inches
 long; scales in 2/3 order, in the largest ones inclining
 to the next higher order.

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Scales broadly orbicular, with cuneate base;
 margins thin very delicately denticulate - about
 6 lines wide

bract short and thin, oblong, acute, ~~not~~
 about 1/4 the length of the scale - lower

Seed broadly obovate, acute at base; wing ~~about~~
~~twice as long~~, broadly obovate nearly as wide as long

Leaf anatomy - Section, Dents on lower side near midway
 between edge & keel - upper keel much more
 prominent than lower one - Pith side fills only
 on lower side - leaf about twice as wide
 as thick;



very oblique

x30

Picea polita
yokohama

Max. swelling leg

Jan 16 1878

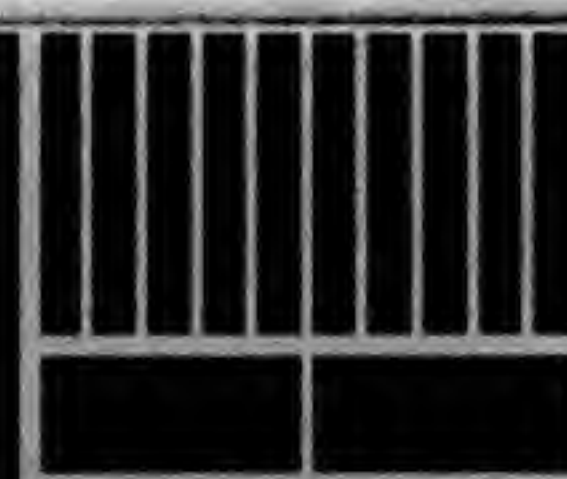


hypoderm on 4 angles

and, interrupted, above, none below

dent. small, very lateral, only in lower
half of leaf

hypoderm within sheath



0 1 2 3 4 5 6 7 8 9 10

cm

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HENRY T. ROHLING,

APOTHECARY,

No. 2600 Laclede Ave., S. W. Cor. Jefferson Ave.,
ST. LOUIS, MO.

No. Date, 187

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12514

Geo. Engelmann, M. D.,

No. 3003 Locust Street.



0 1 2 3 4 5 6 7 8 9 10

cm

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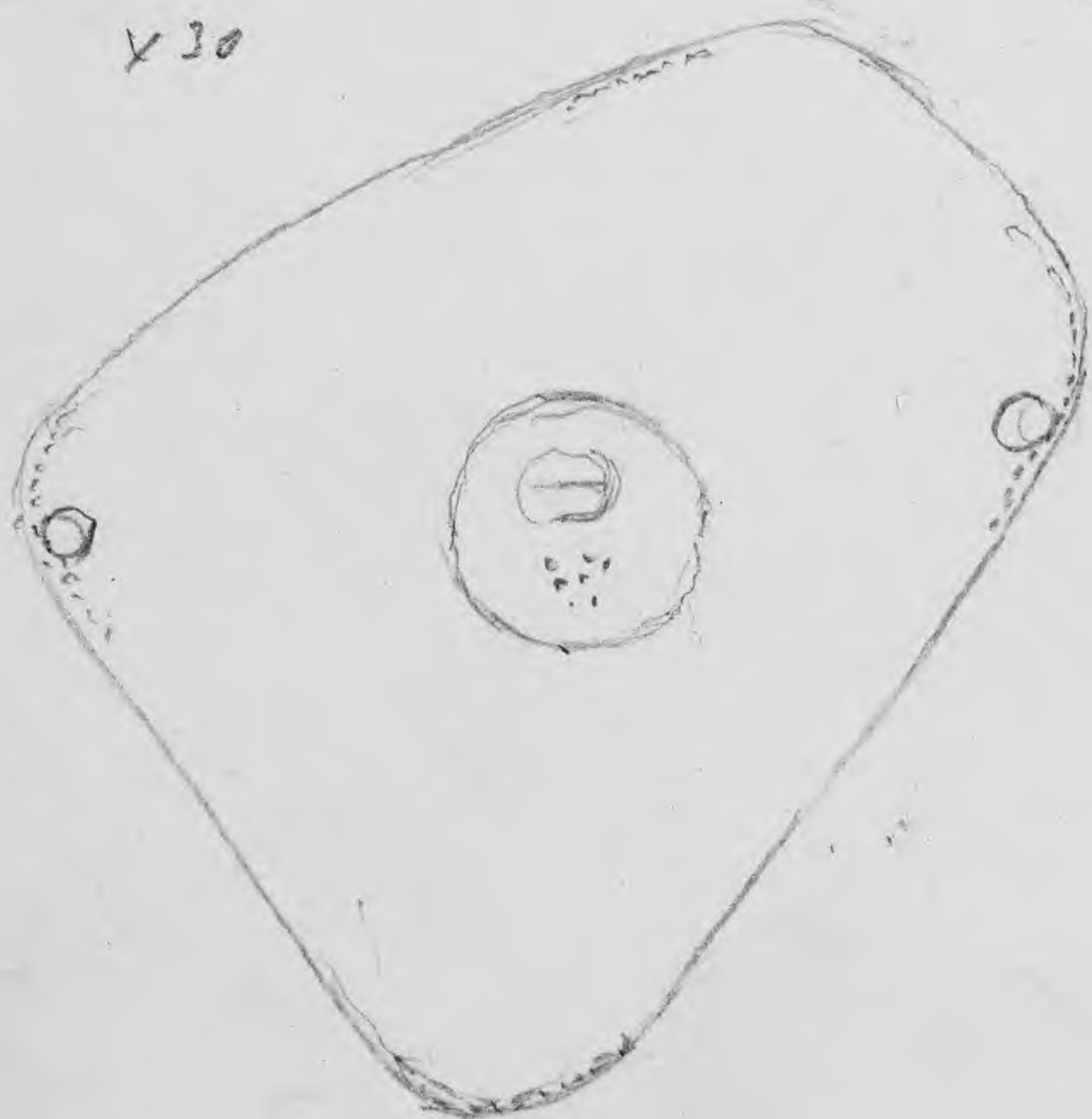
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Picea polita

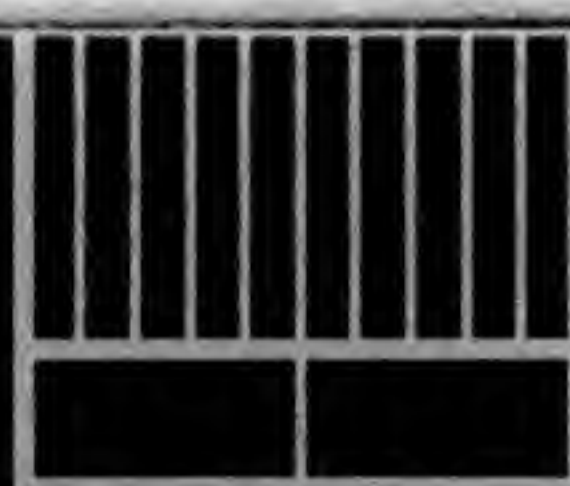
June 16 1878

J. Hoopes Coll Oct 1876

x 30



leaf very oblique
ducts just below the lateral
angles; - lower half of leaf
hypoderm on angles ^{only}
and same with sheath.



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cm

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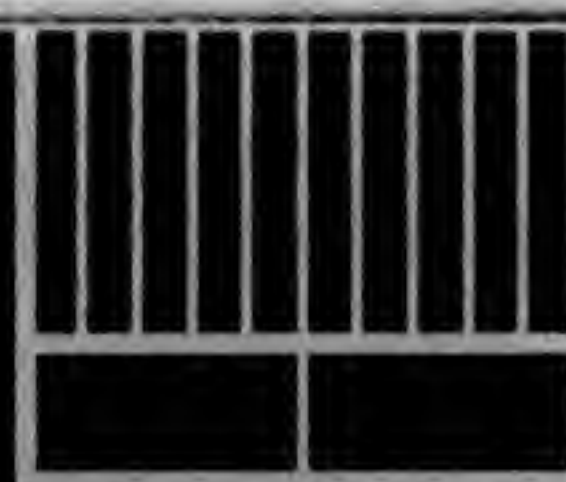
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Picea Omorica

March 1st 1881

x2



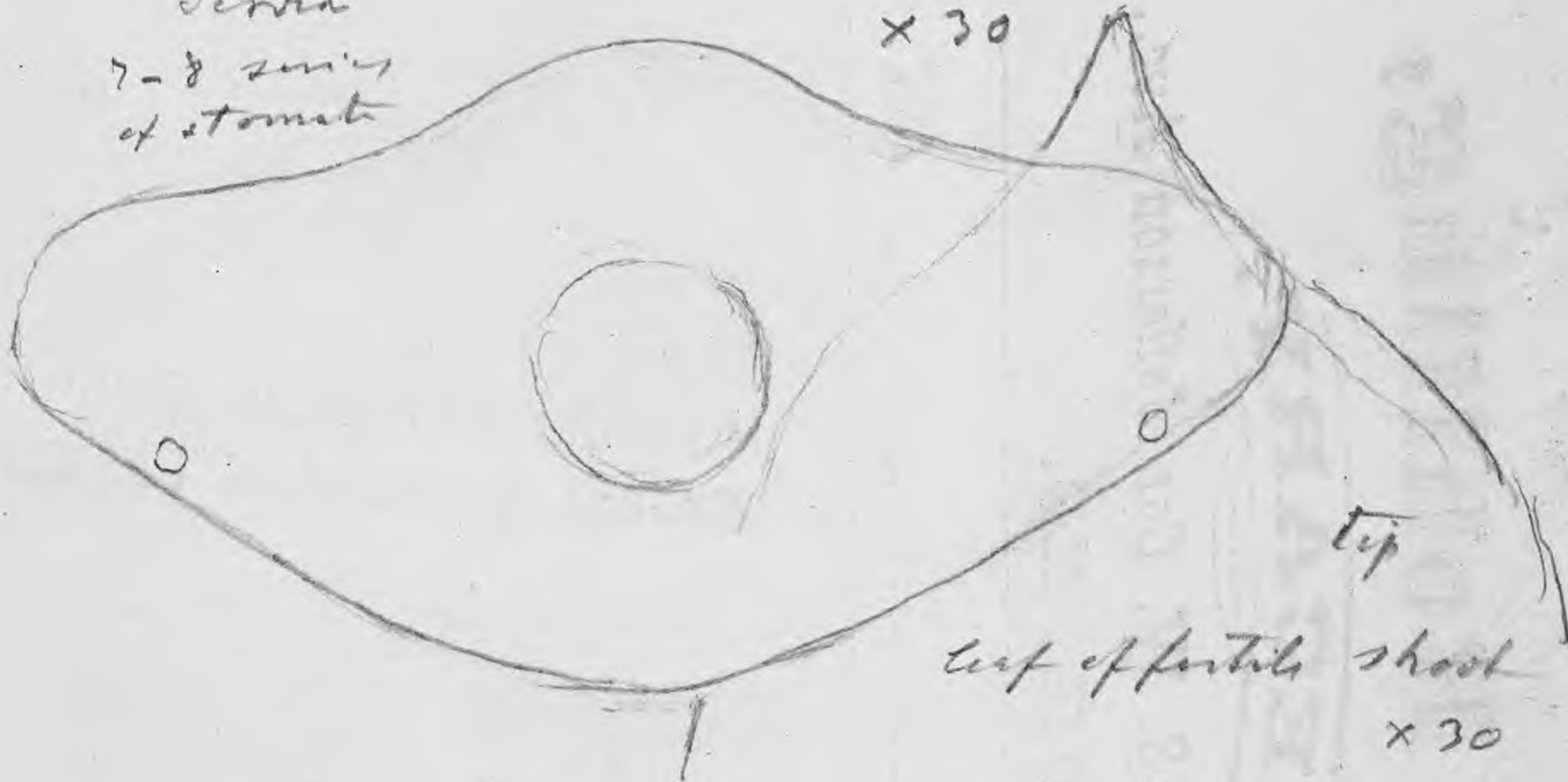
wing about as wide
as long

leaves 5-8 l. long
1-1 1/4 wide



Leaves
7-8 series
of stomata

x30

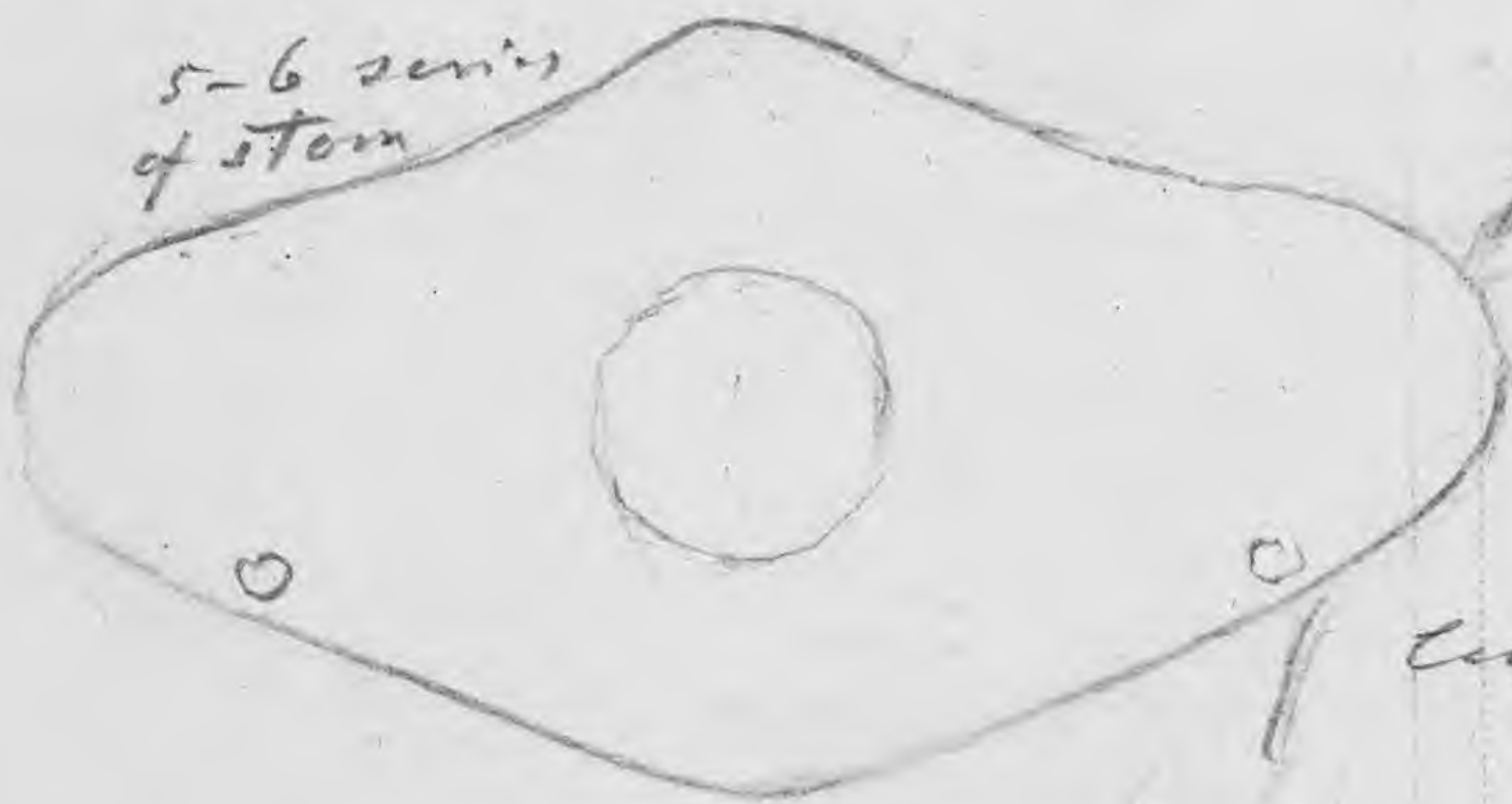


tip

leaf of fertile shoot

x30

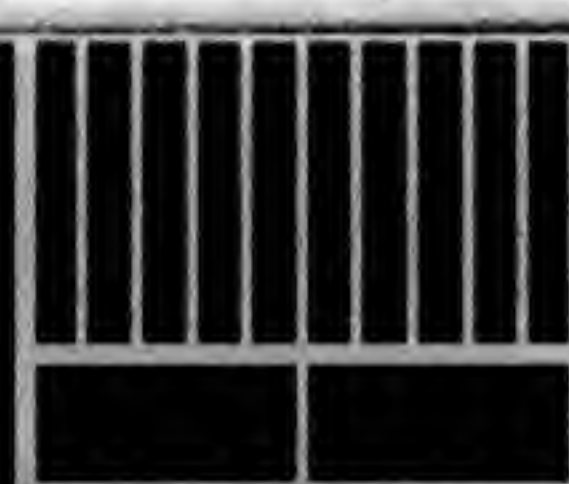
5-6 series
of stomata



tip

leaf of sterile branch

x30



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cm

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APOTHECARY,

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ST. LOUIS, MO.

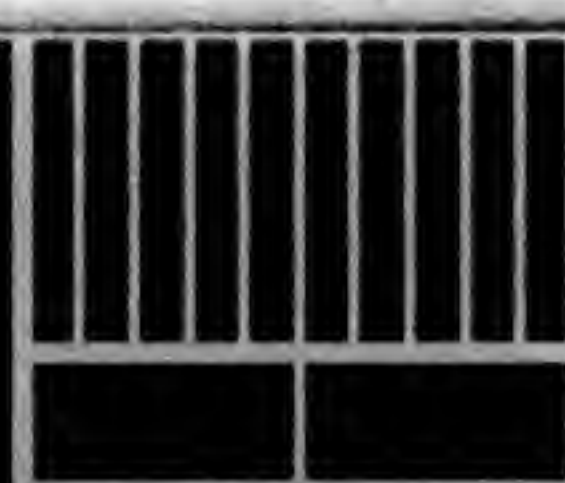
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12516

Geo. Engelmann, M. D.,
No. 3003 Locust Street,



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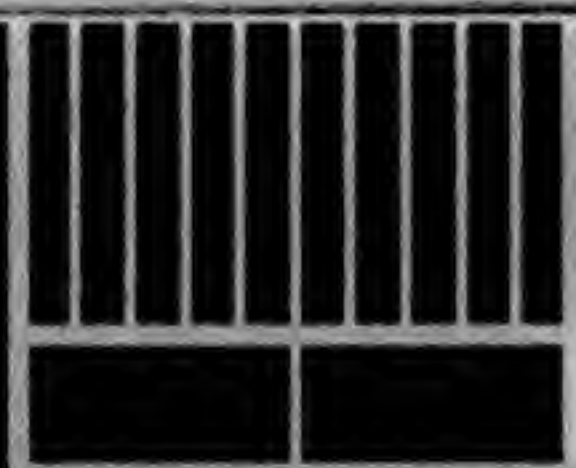
cm

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7 tub *P. exoelsa*
2 *P. polata*
1 *P. Againsii*
1 *P. Gakmanii*
1 *P. Omnicia*



0 1 2 3 4 5 6 7 8 9 10

cm

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265 Pilea Dahurica Fisch
Ajan, Dr F. Ling

June 16 1878

x30

2 series

8 series of stomata



no stomata

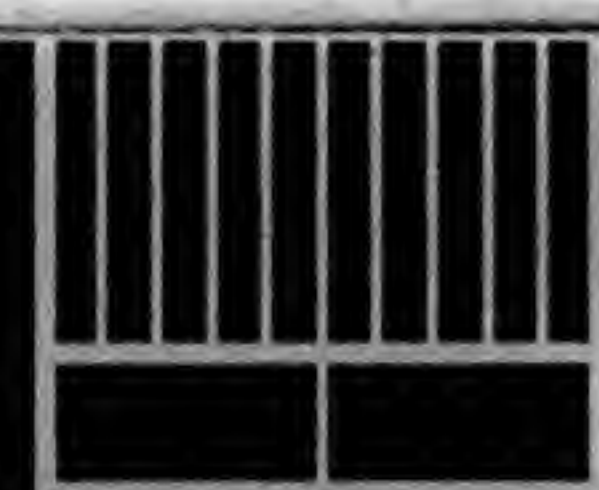
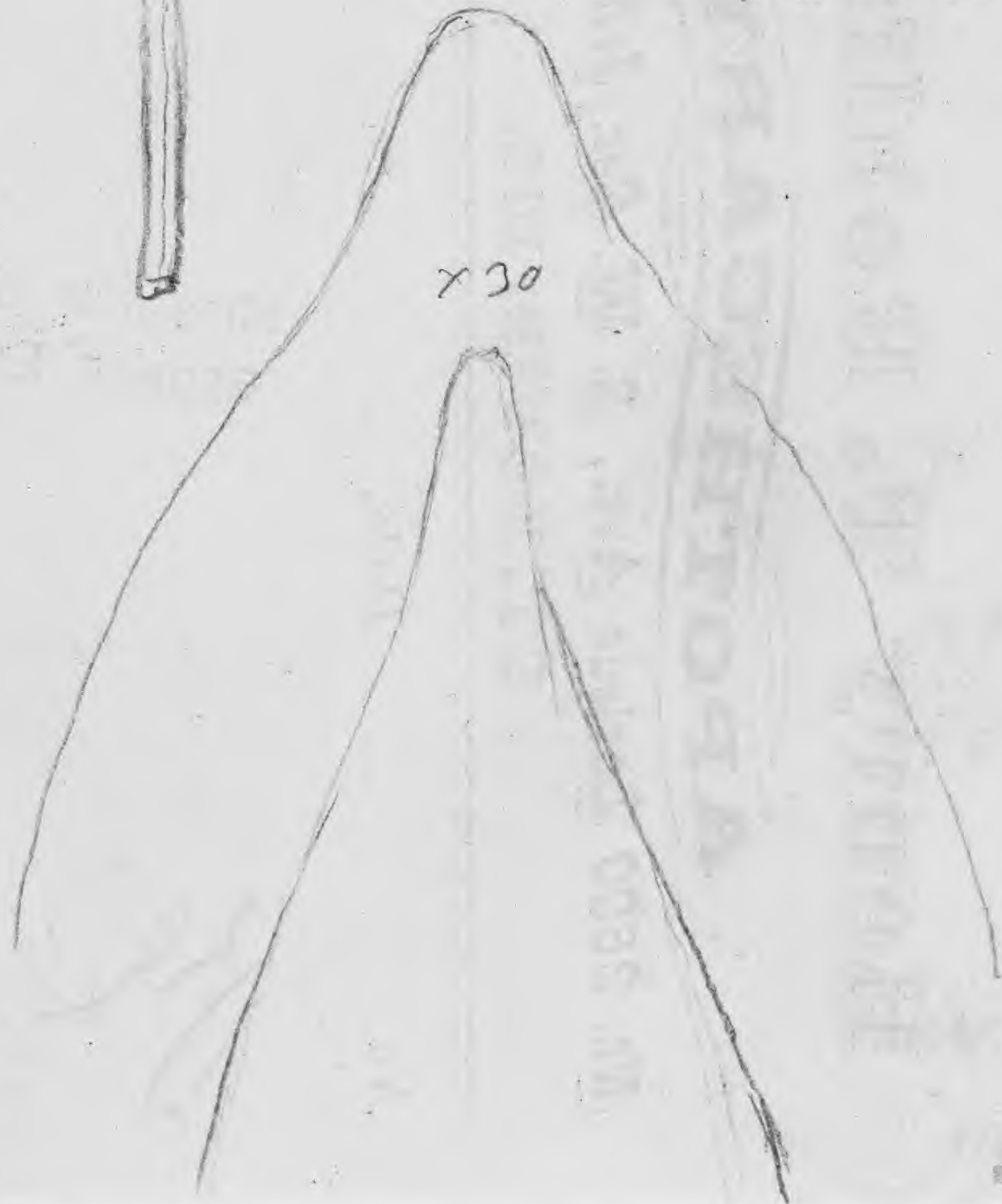
hypodermis continuous below
only on keel above
ducts large on lower part of leaf
below middle,
some hypodermis in sheath

Hb. Florenti, 1868

= Menziesii Fisch
Parlat.



x30



0 1 2 3 4 5 6 7 8 9 10

cm

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HENRY T. BOHLING

APOTHECARY

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Geo. Engelmann, M. D.,
No. 3003 Locust Street.



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cm

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Picea ^{*A. americana*} *Aloue quina*

June 17 1878

2 x 4-5 series of stoma cuticle

Hoopes cult, young tree, fresh

x30



This spring leaf tip x20

2 x 6-8 series of stoma



Cult. Hort Sargent
Cambridge



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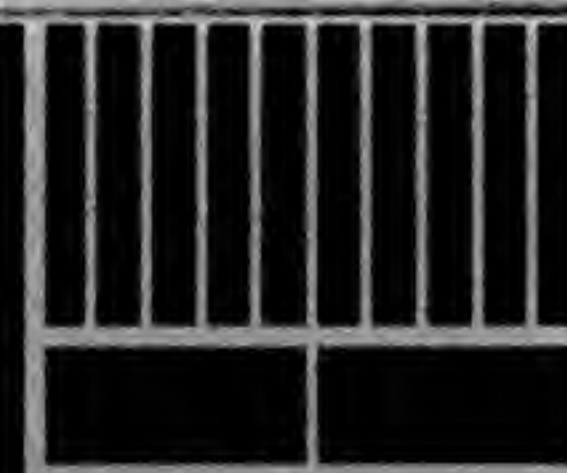
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GEORGE ENGELMANN PAPERS

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cm

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