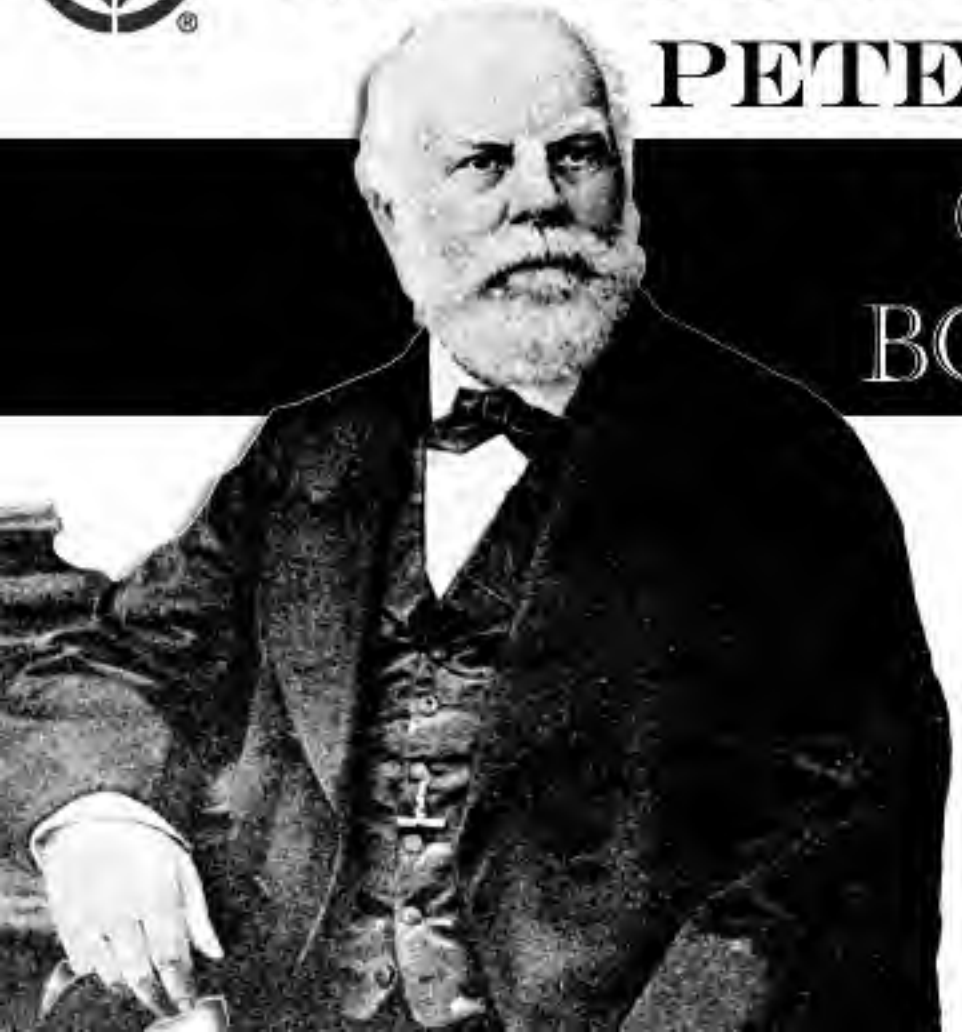
Missouri Botanical Garden
Peter H. Raven Library

George Engelmann Botanical Notebooks



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Abies Douglasii near Lindstrom's Mill, Empire City, 1862
Circumference at base 2' 11" no of rings 113 height 42 feet
"a small tree" thickness of bark 1 inch.
2' 11" = 35" − bark = 33" rads 5 1/4" width of rings 0.35
or over 1/2 line ~~or 1 3/4~~

"Hemlock" of Colorado (Dr Parry)

Mexico, Royl. Hartweg & others
Herb del Monte Ehrenb : Hb Berlin & mea

10651A Abies Douglasii, Laguayra, Ed. Otto. coll. Strob
Berl 749 ?! Berlin June 1869
a mistake in locality ?

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A. Douglasii Nutt Sylv 3. 129

One of the largest trees known 300 feet high.
6–15 feet in diameter – ordinarily 150–200 feet
Old bark rugged, deeply furrowed 9–15 inches
thick. Timber heavy and firm
yellow

E Hall in Bot Gazette April 1877:
the most valuable forest trees of Oregon
6–8 feet in diam. 200 to 300 feet high.
Bark thick and rough.

E Hall in letter Dec 30 1877 Douglasii is
called yellow fir in Oregon. A grandis
I saw none so large as the notes in Centens. & sections Coll make it

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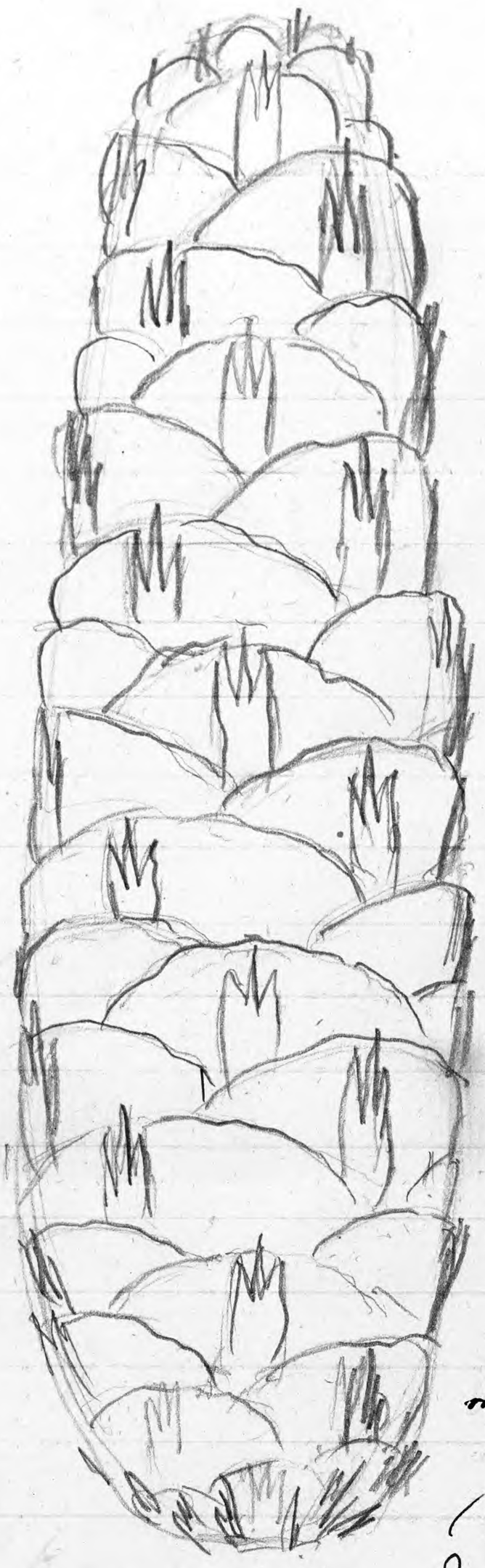
July 23 1875



Abies Douglasii var macrocarpa

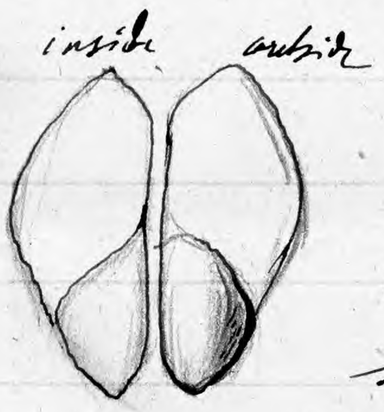
9 miles Pass Ring

cone 6 3/4 inches long nearly 2 inches in largest diameter, nearly cylindrical, slightly tapering

Scales 1 1/2 inches wide or more bracts as long as scales, abt 1 1/2 or even 1 3/4 inches long.

Scales in 8/13 arrangement, the 3 & 5 series the most prominent

Seeds smooth, without glands



5 l. long 4 l. wide wing widest in middle (5 l.), 5–6 l. long scarcely longer than seed.

seed brown and shining on outer or upper side very convex, on inner or lower side (where attached to scale) shining, dull and flat

Embryo (only one examined) with 12 Cotyledons

Leaves 9–12 lines long, acutish, rather thick. Stomata only on lower side margin somewhat revolute or thickened.

Branchlets slightly pubescent

buds ovate-lanceolate, brown, shining, compact.

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Macrocarpa

Abies Douglasii
var macrocarpa Torr
in Bot Ives Exp
p. 28

Discovered by Dr Parry in 1851
but not published
Rediscovered by J. S. Newberry in Ives Exp
Nov 16th 1857.

Lemmon says: cones up to 11 inches
long

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Mrs Douglas' manzanita Jan 7 1876

San Bernardino, Cal, 1874

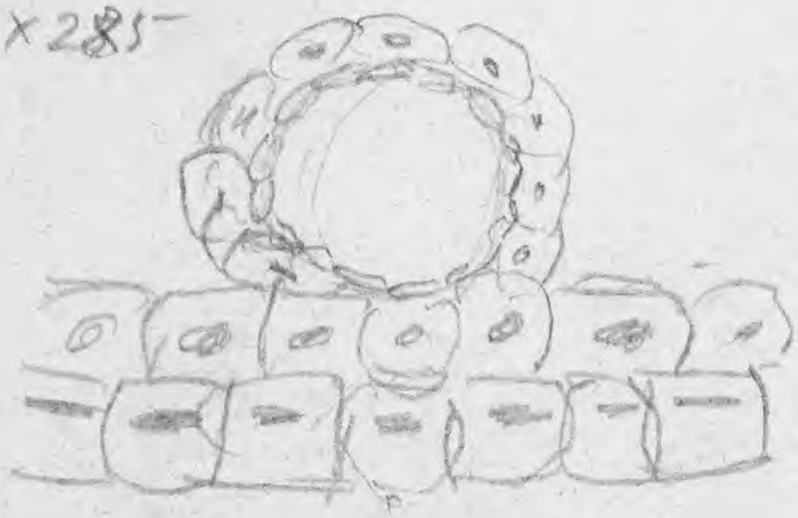
Young mrs

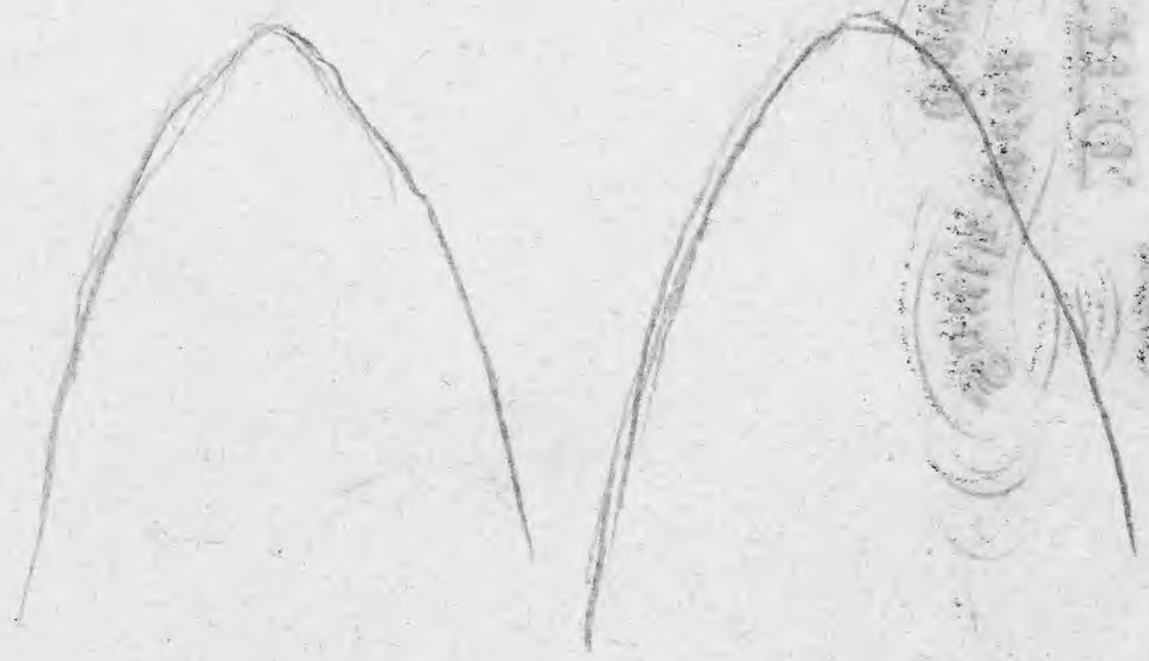
x 30

hypoderm cells under upper surface continuous

5-7 series of stomata

x285





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Leitch & Carlies

DRUGGISTS

South-west Corner Fifth and Market Streets

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Jan 1 1878

Douglasii: I have never seen this species with very wide inner rings — even in ~~the~~ early growth the rings are not more than 1½ lines, oft only ½ line wide or 15 lines to 10 rings at most 5 lines at least.

Bark in large trees 3 ~~or~~ 5 to even 7 inches in thickness — always strongly mottled. spec. in Centenn Exhibition

Abies amabilis of California and Oregon botanists may be often nothing but Douglasii which is called yellow fir

brings us to what I have always considered as the true *amabilis* of Douglas, since I had seen those specimens in the English Gardens, mentioned above — the only ones, which, I repeat it, can have come from Douglas' seeds. One is identical with our *grandis* from Oregon, the other seems to differ, and certainly deserves the name of *amabilis* on account of its dark glossy green and very dense foliage conspicuously white below. Prof M'Nab has come to the same conclusion, but he differs from me in considering it a distinct species, while I can see in it only a form — perhaps a mountain form — of *grandis* itself. Douglas ~~gives~~ ascribes to it a large cone which he sent home, and which was preserved in the collection of the ~~Hort.~~ Hort. Society, but which can not be traced now. I have seen Oregon specimens with the same dense foliage but with the ordinary cones of *grandis*. I venture, therefore, to introduce it as

Var: ~~amabilis~~ *densifolia*

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106655

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Dr Vasey

...a. The specimen of which you wrote as 384 with the brown bark and very narrow rings is Mr Dufur's No 12, and called by him A. Douglasii !! I will quote his remarks concerning it – "Is the timber that composes the great lumbering wealth of Oregon and W.T. Not unfrequently attains the size of 8-10-12 and sometimes 15 feet in diameter and from 250 to 350 ft in height.

Is found in its greatest perfection along the tributaries of the Columbia River, also in the valleys of rivers emptying into the Pacific Ocean & Puget Sound. The wood is soft, free and easily worked, of a yellowish color, much prized for masts, spars, plank &c for shipbuilding; is also equally valuable for all kinds of building material excepting sash, moulding and scroll work.., Is of rapid growth, the young trees frequently attaining 70 ft in ten or twelve years. Is very strong & durable. This timber grows very fine along the base of the coast range and western slope of the Cascade mountains as far up as 3000 ft altitude. I am of the opinion that it is the real grandis of Oregon & W.T."

He mentions a tree cut by him which was 321 ft high and counted 308 annual rings – Now all this reads like A. Douglasii but his wood specimen was what you speak of – No 384. I could only make of this A. amabilis and so called it. I have already stated that Mr D. sent me the real Douglasii, as No 9 but called it A. amabilis. I [illegible]

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his specimens — o

No 9 — they are I think packed away and not just now accessible. It, (No 12) must I think be either amabilis or nobilis. Mr D. sent me nothing as nobilis and I have no wood of that with

Rec Jan 14 '79
Ans same Day

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Washington D.C.,
January 11th 1878

Dr Geo. Engelmann

Dear Sir,

On account of the extremely cold weather I could not spend time enough in the outbuilding where the wood sections are kept, to examine properly the Oregon specimens. I have now however been able to look them over. I have informed you before that the Oregon specimens were very unsatisfactory and especially so because the leaf specimens did not always agree with the wood [illegible] and to the name [illegible]

Clearly A. Douglasii, but he called it A. amabilis, and I quoted his account of it under A. amabilis which was an error. His No 3 he called Abies Williamsonii which I was not satisfied with, as the wood seemed to be nearly the same [illegible] A. Menziesii. I think I called

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Abies Douglasii sulk/Dougl (N Mex ? Ariz ?) smaller than the giants of British Columbia, where the species reaches 200-300 feet in height. "Dr Hooker should make a coll. of Barks of all the species" 6 foot slabs" Gard. Chron Jan 29 1870 A. Murray.

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Gardeners monthly & horticulturist. Jan 1876 p. 21

Abies macrocarpa, a new coniferous tree by Dr Geo Vasey

In the fall of 1874 Mr F. M Ring of San Gorgonio Pass sent cones & twigs — Nov 25th 74 he sent further information

Sept 14 1875 — he wrote again (Copy of note sent to me by Vasey) — Dr Palmer also found it 1875 in San Felipe Cañon. and sent specimens. No Cones in 1875.

Dr Vasey continues: Cones 5 inches long 2½ in diam [NB. with spreading scales] composed of about 60 scales; largest scales 1½ – 1¾ inches wide. Bracts not projecting as far as in Douglasii — branches longer and slimmer, leaves rather more acutely pointed — Seed triangular — twice as long (twelfth 7/8 – 1 inch long) — cones 5 times as heavy as in Douglasii (!!)

Brewer had also collected it about 1862

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5 Abies Douglasii. More or less abundantly met with through the entire Mountain district except on the higher elevations, a very stately tree with a graceful oval outline; spreading branches, curving upward at the extremities. Wood very indifferent quality, inclined to warp and crack in seasoning, turning reddish brown in drying; bark very rough, thick and dark colored, slow growth — average height 80 ft

Common at Fountain qui Doit, 1862. D. Parry Jun 1861

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My Dear Dr

10659

In your last you requested some notes which I have not yet furnished

1st Pines. I have observations and collections of the following,

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1 Pinus aristata. Engl. & exclusively alpine. never found at a lower elevation than 9000. to 10000. ft?

2 P. flexilis. James. Rather scattering distributed. never forming an exclusive forest

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Abies Douglasii, British Columbia (from Gard. Chron. June 28 1862 p. 595

34 inches radius, 354 years old [about 10 years to the inch] 309 feet high

inner two inches ~~show~~ 12 rings

2d — — — 9

3d 12 4' 19 5' 17 6' 23 7' 16 8' 17

~~9th~~ ~~9'~~ 14 10' 18 11' 24 12' 21 13' 24

~~14'~~ 14' 24 15' 31 16' 36 17' 42 = 34 inches, 354 rings

Brewer's notes

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Dear Sir

Will you please send me your 1st Article or monograph of the Oaks or any others on Botanical subjects I should be exceedingly obliged to you for them and if I can do any thing for you in return will be most happy to

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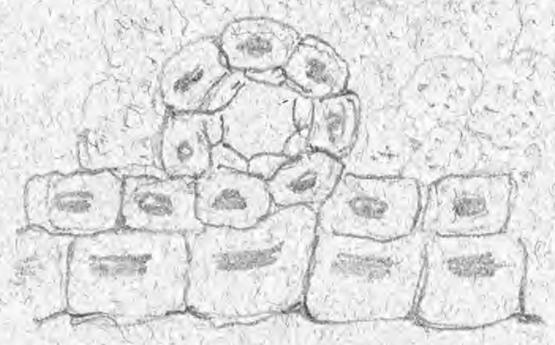
Pseudotsuga macrocarpa

Dec 30 1875

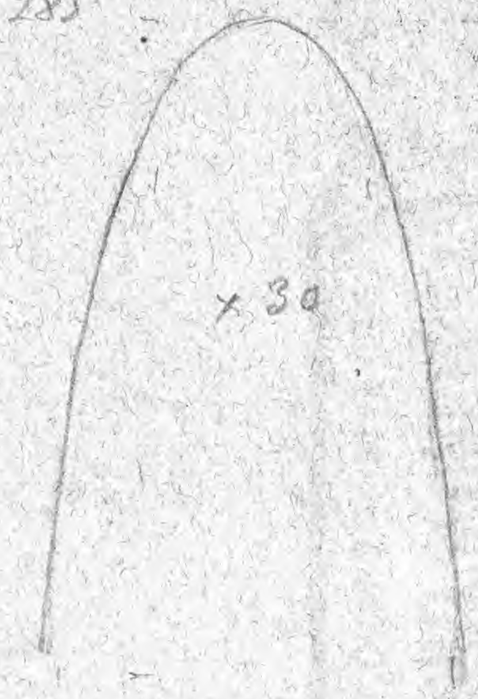
San Bernardino Dr Parry Dec 1875

no stomata



×285

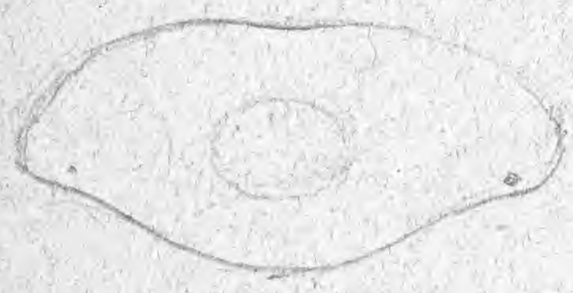
4-5 series of stomata



×30

leaves pointed or obtuse

leaves $\frac{33-39}{30}$ = 1.1 – 1.3 mm wide



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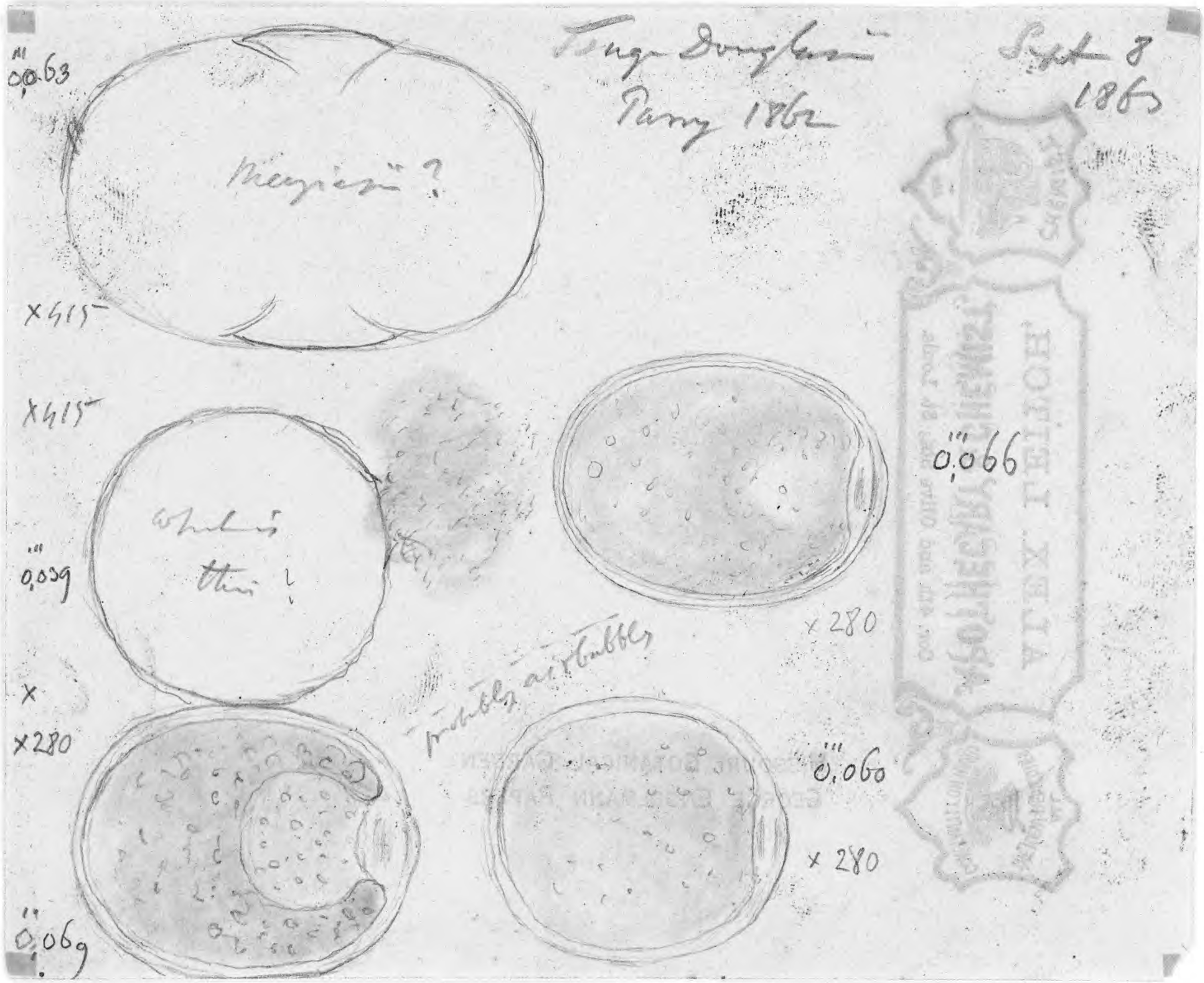

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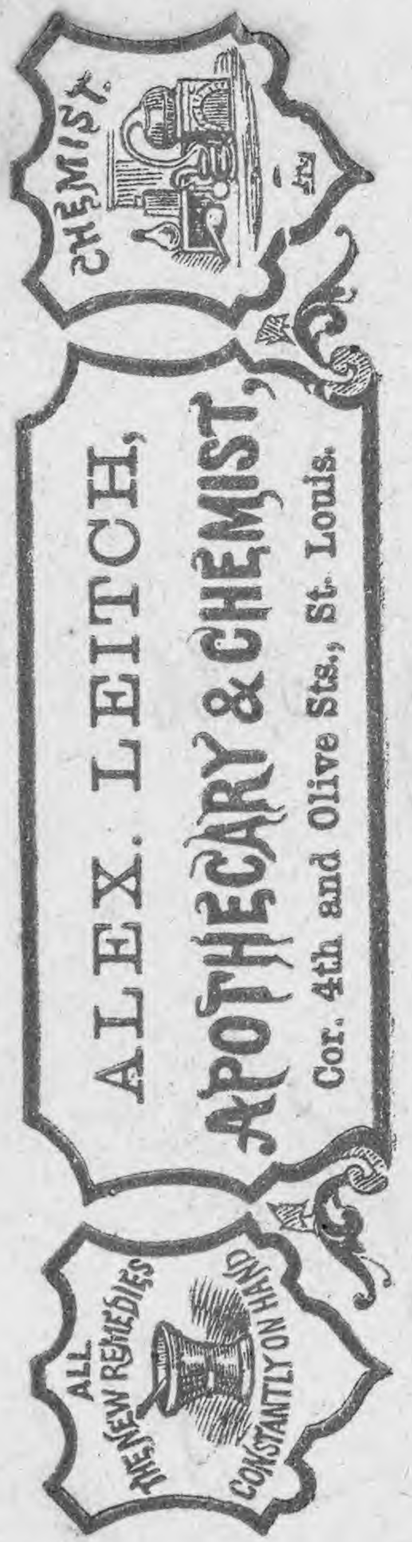

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