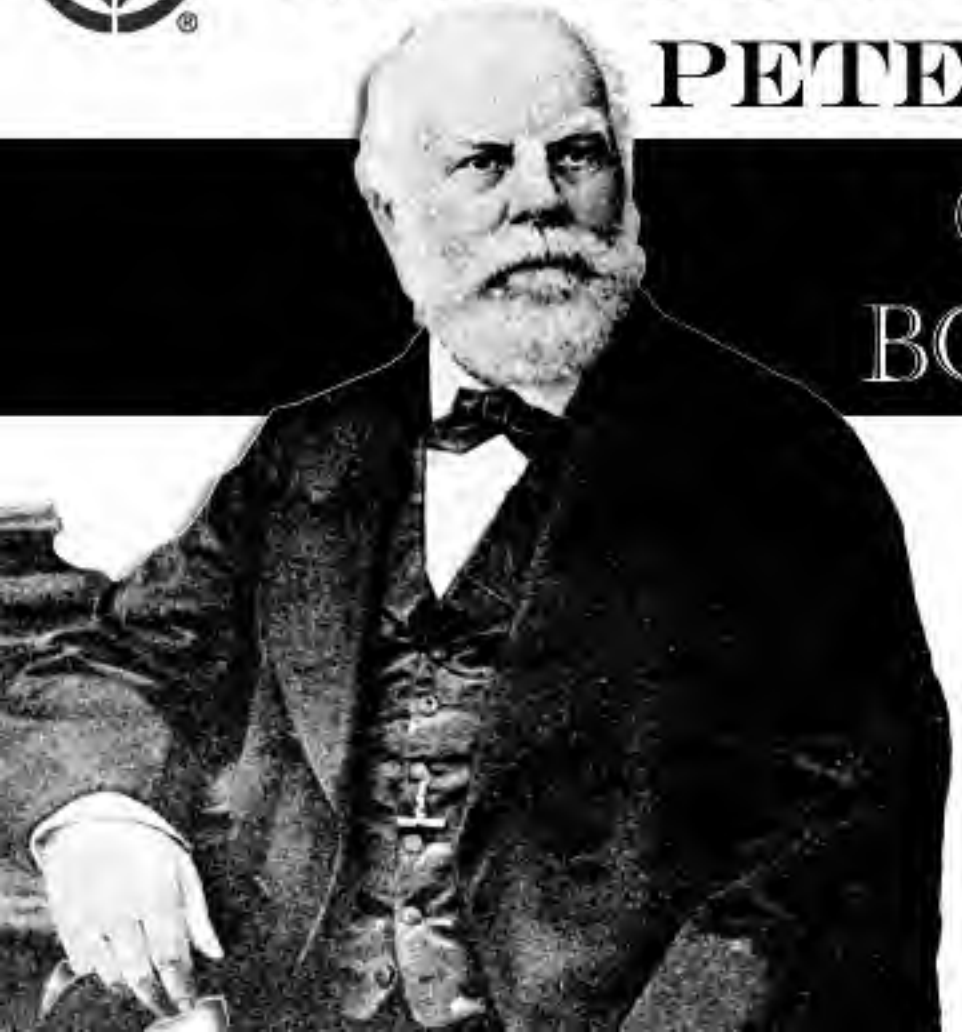
# Missouri Botanical Garden
## Peter H. Raven Library

# 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.*

| | | | | | | |
|---|---|---|---|---|---|---|
| July | 2 | 4 | | | | 3 |
| August | 3 | | 1 | | 1 | 2 |
| September | 4 | | | 1 | 4 | 8 |
| October | 3 | 1 | 1 | 1 | 7 | 1 |
| November | 2 | 3 | | 7 | | 7 |
| December | 2 | 3 | | | | 6 |
| | 50 + el. | 36 + el. | 23 — el. | 28 — el. | 15 no el. | 34 no el. |

Snowing was accompanied

| | By Positive Electricity. | | By Negative Electricity. | | By no Electricity. | |
|---|---|---|---|---|---|---|
| | In 1861. | In 1862. | In 1861. | In 1862. | In 1861. | In 1862. |
| January | 3 | 9 | | 2 | | |
| February | 12 | 8 | | 1 | | |
| March | 3 | 12 | | | | |
| October | | 1 | | | | |
| November | | 4 | | | | |
| December | 5 | 2 | 2 | | | 1 |
| | 23 + el. | 36 + el. | 2 — el. | 3 — el. | | 1 no el. |

REMARKS.

The monthly mean of atmospheric electricity in 1862 was not quite so regular as that in 1861. While in 1861 an un-

Copy 1861 Sylvester Allen Texas

200-204

formed by the months of January, February, November and December; the second with a mean electricity by the months of March, April, May and October; and the third with the lowest electricity by the months of June, July, August and September.

The aggregate monthly mean of

| | | | | | |
|---|---|---|---|---|---|
| The first group in 1861 is | | 52.9— | in 1862, | 54.6 |
| The second | " | " | 33.5 | " | 35.2 |
| The third | " | " | 14.1 | " | 10.5 |

Thus in 1861 the third group prevailed, and in 1862 the first and second. But these differences are so well balanced throughout the year, that the mean of the whole year in 1861 and in 1862 is exactly the same, namely, 8.4. Such an identity in the yearly result, even to decimals, is of course not to be expected every year; but it seems to prove, at least, that the yearly mean of electricity is as constant as that of temperature, of relative humidity, and of atmospheric pressure.

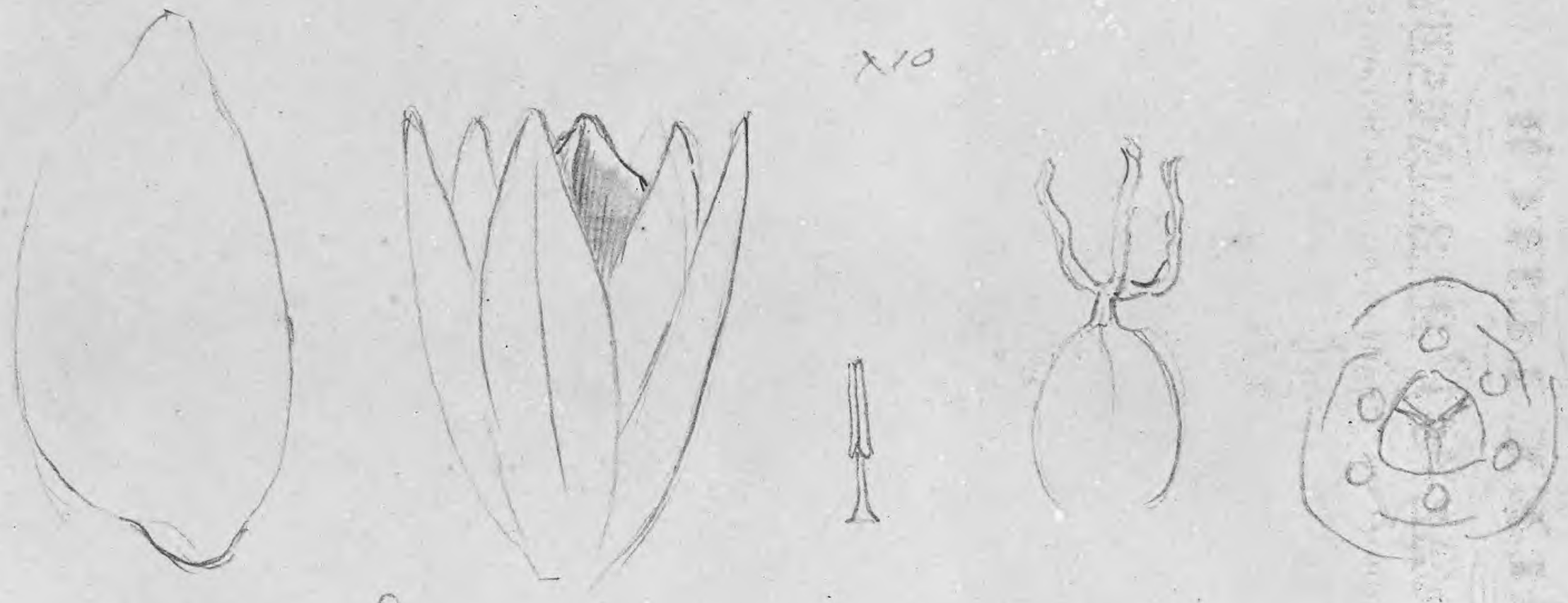
The third table, showing the daily periodicity of atmospheric electricity, confirms the daily two maxima and two minima of electricity as an undeniable fact.

Ilicinus arborius  Aug 20 1865

Mont Cenis, Cosson

x60

x10



unripe seed

sepalis antherosulis
aequalibus, rapsh aestivo
aestivum aequantibus

# ALEX. LEITCH.

## APOTHECARY & PHARMACEUTIST.

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

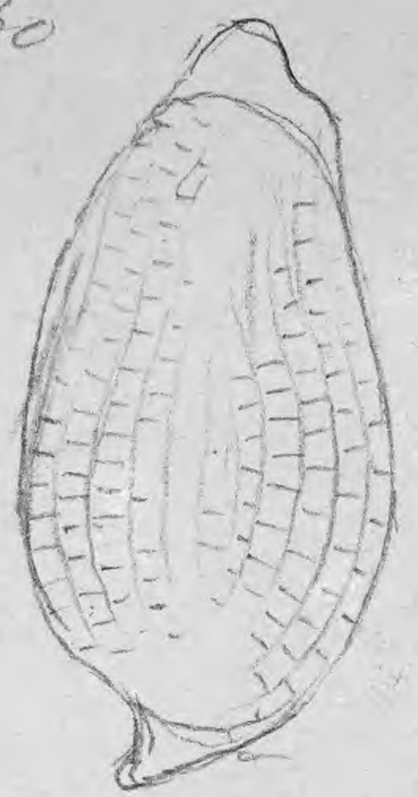
Juncus articus

Aug 19 1865

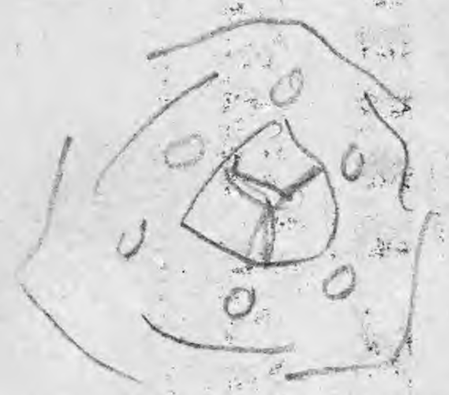
Zermatt, P. Hoerle

ought to be reversed

x 60



x 10



12–16 stria visible,

sepala interna anthâsmula Caryophyllea

capsula parietibus exserta,

rotund, very fine, substrut-

= scotland specimen

9120

# ALEX. LEITCH,

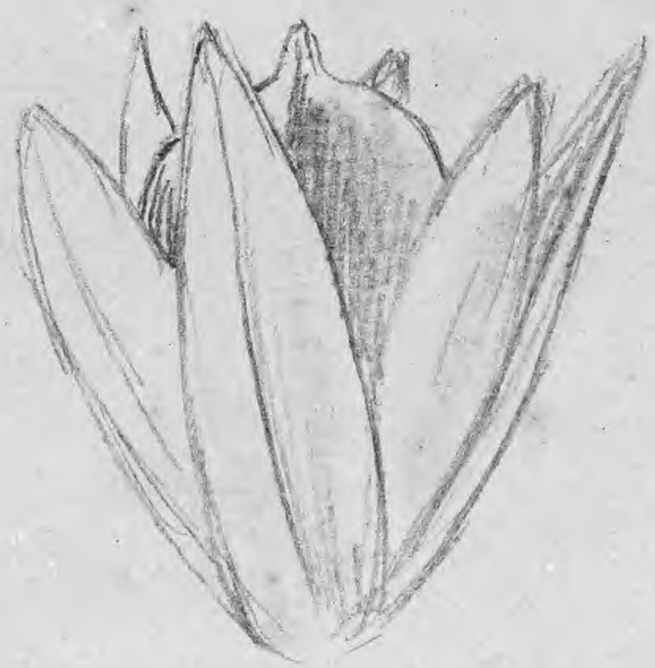
## APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

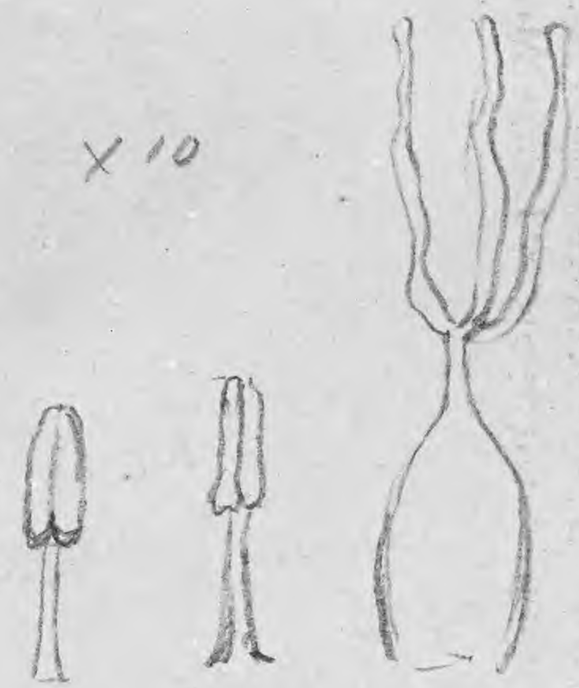
Luzula arctica
Norway, Fries

Aug 20 1885

x60



x10



unique seed

filament equal to anther or a little longer

caps. ovata
obtusa mucronata
sepala longiora aequans
interiora obtusiuscula pauli
brevora

# ALEX. LEITCH,

## APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

Jan 16 1866

Ins Kodiak

Ex herb Ac Petersb. ~ 146 gray

before flowering

just before flowering

# ALEX. LEITCH

## APOTHECARY & PHARMACEUTIST,

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

" D. arctica "

" Sitcha "

Jan 16 1866

Coll. H.G. Grand Petersb

= H.G. Gray

only fruit seen!

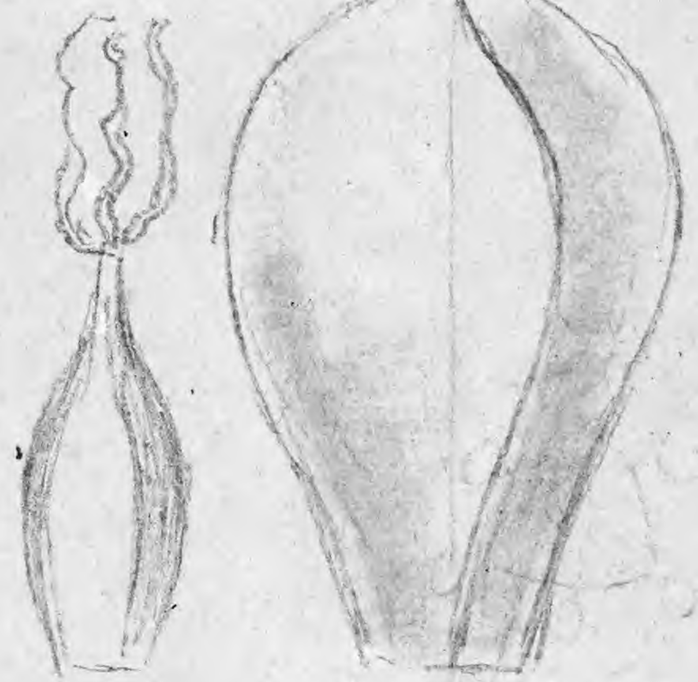
abortive at base?

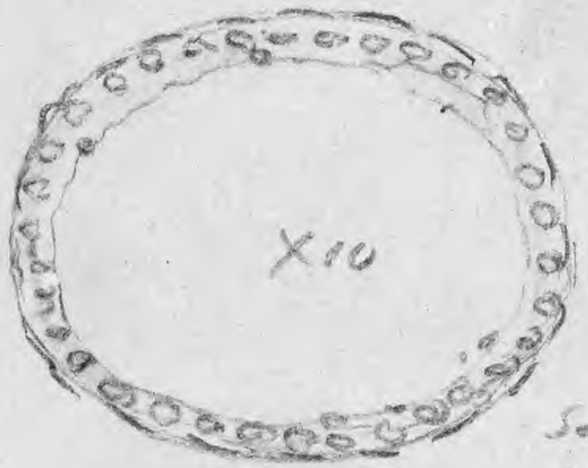
(printed Label)

Ins Kodiak, H.G. Petersb. = H.G. Gray

is the same, not yet in flower

very unripe






stems hollow


Scale of largest stem

stamens as long or shorter than half the sepals, anthers = filament.

inner sepals very little shorter and a little more obtuse than outer ones

# ALEX. LEITCH

## APOTHECARY & PHARMACEUTIST,

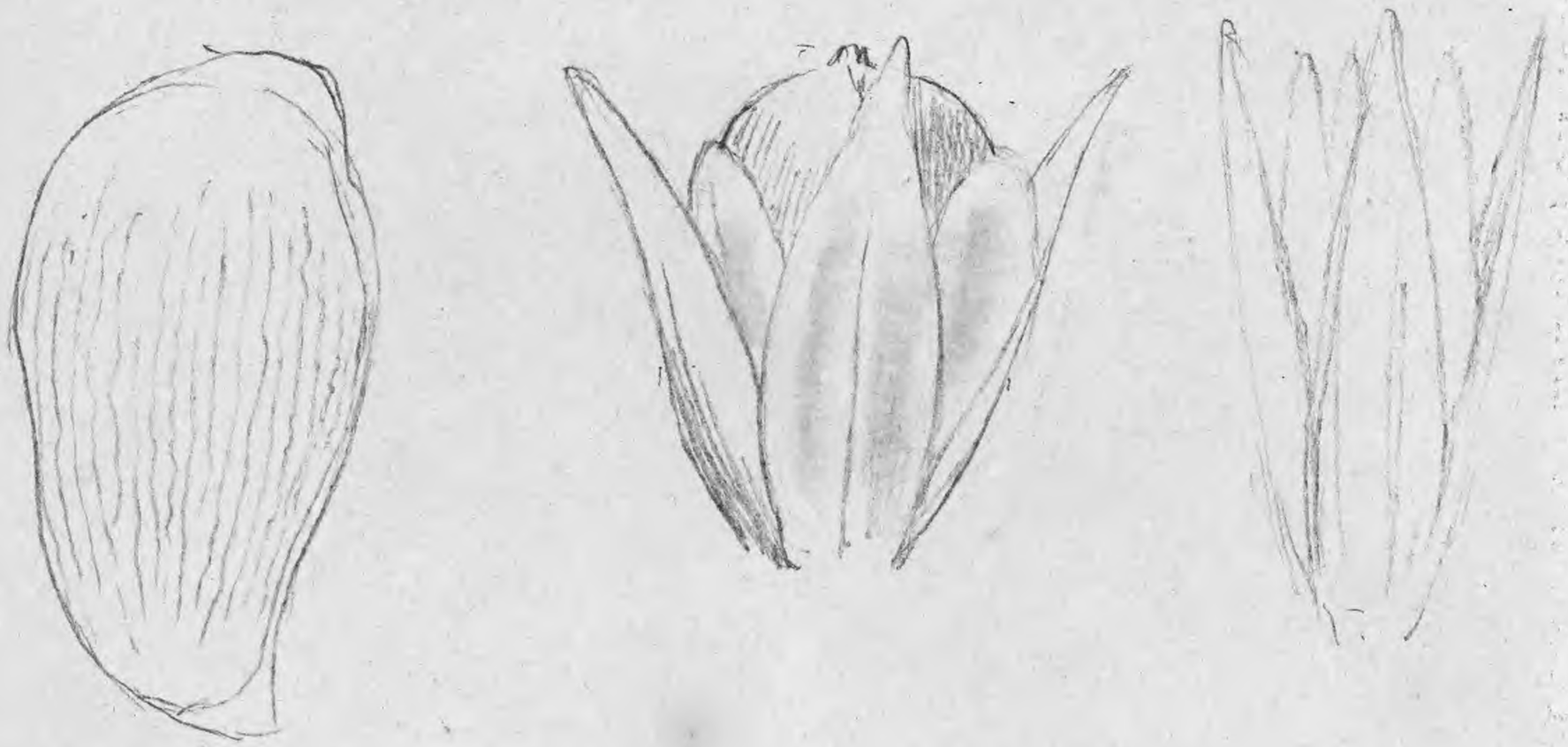
COR. 4TH & OLIVE STS., ST. LOUIS.

2 antiens

Feb 1 1866

Greenland [Dr Kane ?]

in H. Desmond



9124

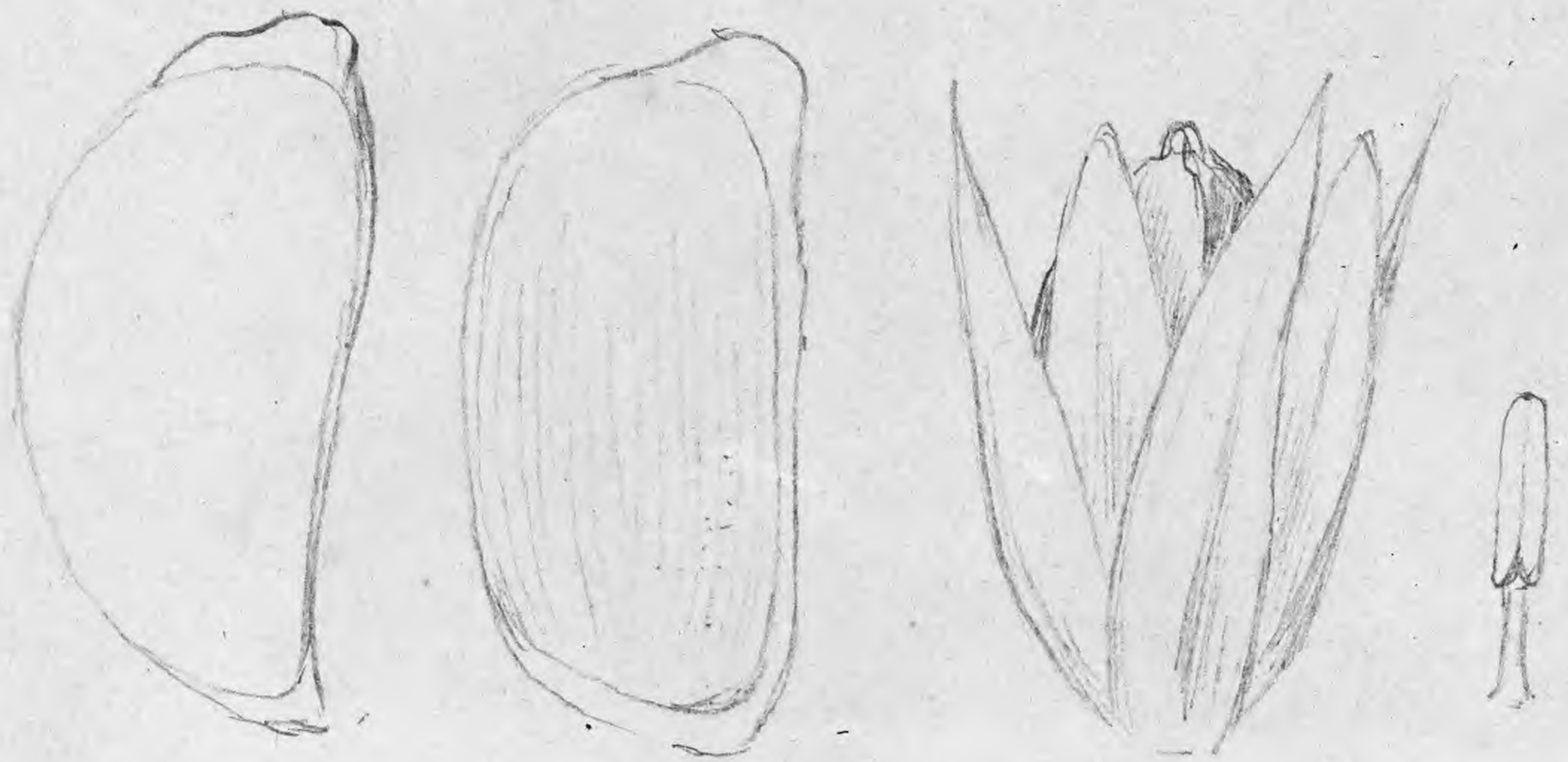
# ALEX. LEITCH

## APOTHECARY & PHARMACEUTIST,

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

L. antiquus  Feb 1 1866

Scotland, Hooker  Herb Oli



x150

crossing
much less distinct

reticulation very
faint and fine
abt 16 striae visible on seed (25 in all?)

# ALEX. LEITCH

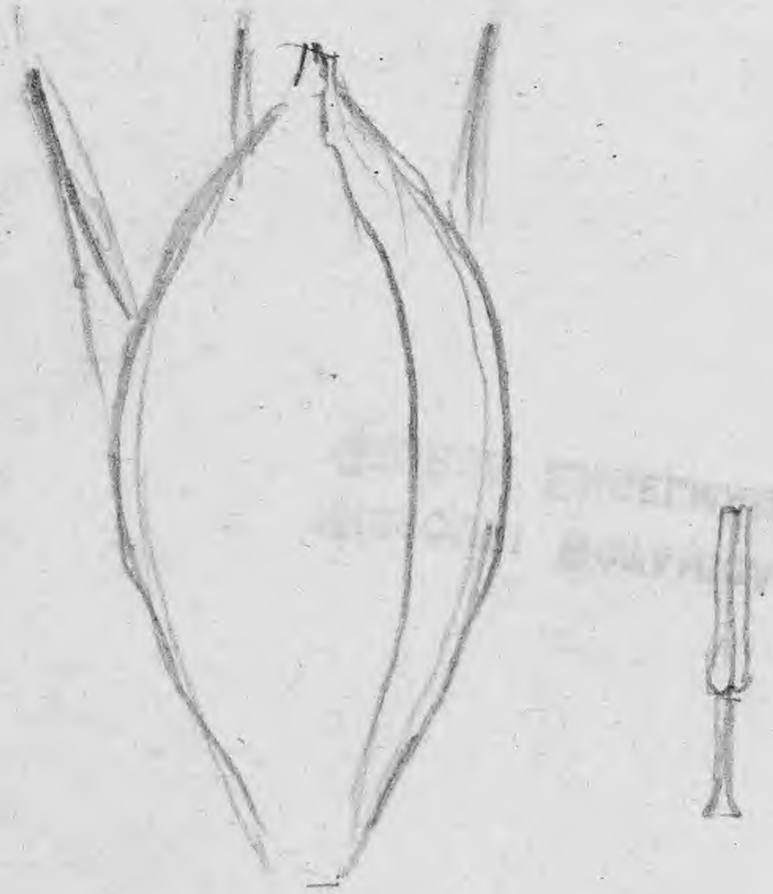
## APOTHECARY & PHARMACEUTIST,

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

P. aristatum
Kamtschatka

Feb. 26 1863

Hb. Hort Petersb
31



# ALEX. LEITCH,

## APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

"J. antiquus!" Febr 25 1868

(Bishop Sitchensis) Unalaschka, Eschscholtz

Hb Hort Petrop. 14

fully ripe seed

indistinctly reticulate

rugulose

similar to J. filiformis Caps. pyriform

9127

# ALEX. LEITCH,

## APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

E. Meyer in Ledebour Flor Ross IV. 223
(1853)

Juncus arcticus Willd — — —
perianthii foliolis — capsulam
ellipticam obtusam mucronatam
vix aequantibus — —
Hab in Russia arctica ! ! ! ! !
et forte in Insula Sitcha (Bongard)
Planta ex Insula Sitcha, ne ad Junc. vol
Balticum vel Drummondi pertineat
suspicor. Ambo et glaucus [spalva pro Baltico
et Drummondi in Insula Unalaschka non
prorsus ab Insula Sitcha crescunt

# ALEX. LEITCH

## APOTHECARY & PHARMACEUTIST,

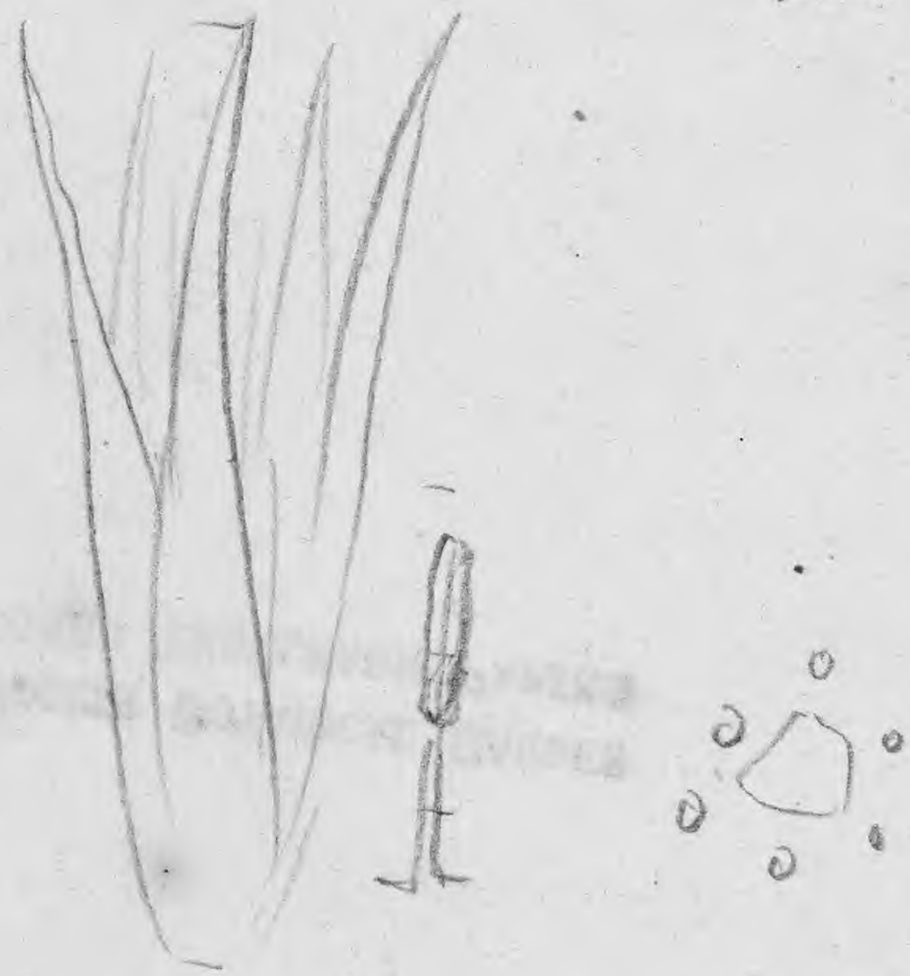
COR. 4TH & OLIVE STS., ST. LOUIS.

J. austin

Mulenbergia

Mertens

x 10



# ALEX. LEITCH,

## APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

distinguished from J. arvicus by the larger flowers and the piriform, (abruptly acuminate or rather) mucronate capsule and the very small obtu- lanceolate seeds.

But as the size of the flowers is not of absolute importance, the single capsule seen may be abortive, and the seeds not in it were not ripe. I have to wait for better, more complete specimens, before settling on this as a new species.

Filaments anthers and pistil are the same in both species

# EDWIN R. SWANN & CO.

## Apothecaries & Pharmaceutists,

S.W. CORNER OF TWELFTH & OLIVE STS

## ST. LOUIS.

Is not this Sotcha plant

I. compressus β. anthela subsimplici
Mey. Rel. Haenk. 1. 141

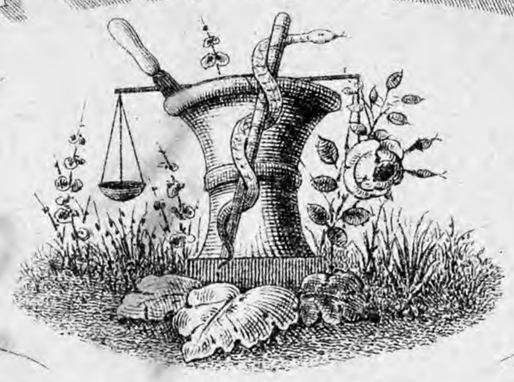
I. Haenkei Meyer Syn. Junc. p. 10

anthela 4–8 flora

no.

# EDWIN R. SWANN & CO.

## Apothecaries & Pharmaceutists,



S.W. CORNER OF TWELFTH & OLIVE STS

## ST. LOUIS.



9131

Synonymy sectionis var Sitchensis

| | Gray | Engelm |
|---|---|---|
| Ins Kodiak ex Ht St. Petrop sine nom. | Kodiak | Kodiak |
| Sitcha sub nom P. sectionis | Sitka | (Sitka) |

ALEX. LEITCH

APOTHECARY & PHARMACEUTIST,