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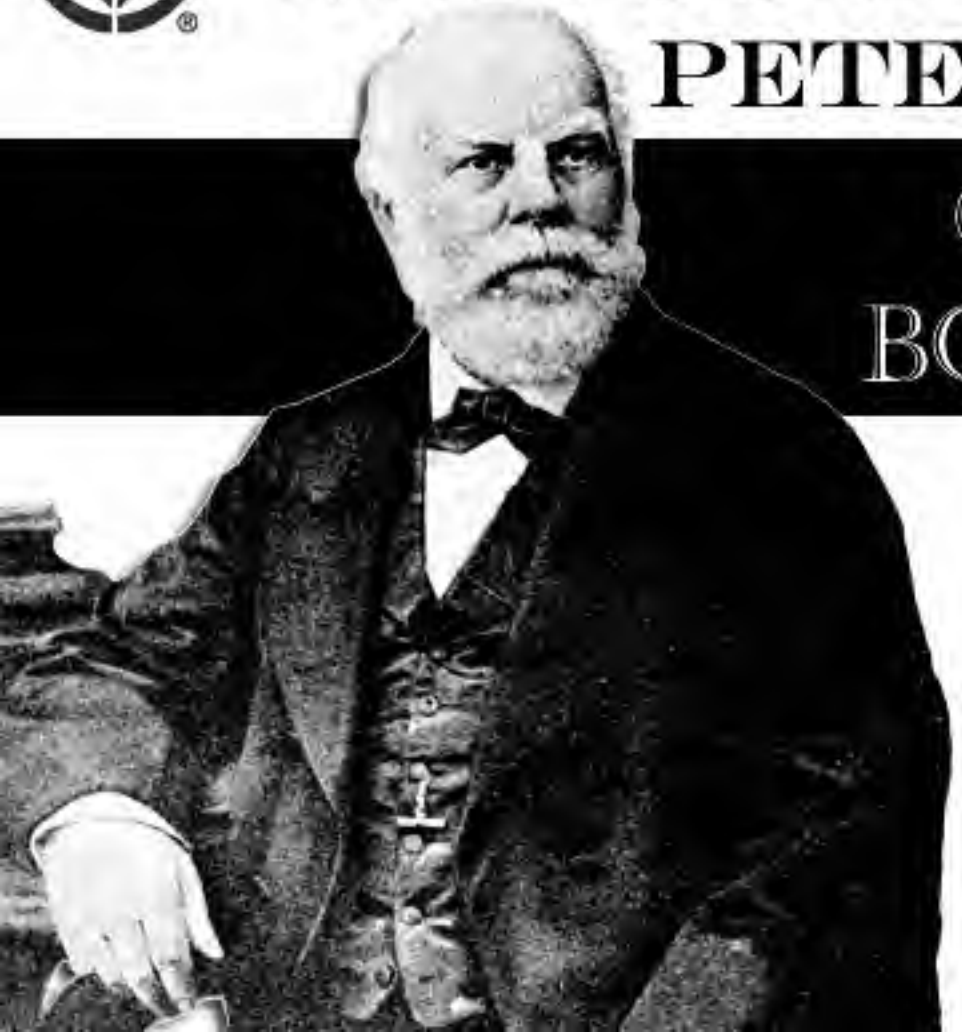


Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

1-27

Vagitanei

10012

Sagittaria

Cotherville, Down

Octob 5 1881

x10

nearly mature achen

x10

very young achen

pistil in flower

single female whorl – often even one of these lowest flowers male; pedicel in male and female flowers equal

x10

Leitch & Corlies

DRUGGISTS

South West Corner Fifth and Market Streets

10013

Oct 1821

x10

M.A. Curtis

S. Carolina

10014

Leitch & Dare
SouthWest Corner E

Sagittaria N 713 R. Lindh.

fruit winged on back and somewhat winged carinate on the sides

pistills

pedicelli fructiferi brevioribus, subtrihedris, deflexis, recurvatis, but no other difference from S. graminea

- 10015

ALEX. LEITCH,

APOTHECARY & PHARMACEUTIST,

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

July 1860

Sagittaria

Pierdenales 1847

D D D D

pistils

Pollen $\frac{4\frac{1}{4}}{412} = 0.011$ lin

$\frac{-5}{412} = 0.012$

10016

ALEX. LEITCH,

APOTHECARY & PHARMACEUTIST,

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

1862...25.9 30.2 45.2 58.0 69.4 75.1 81.2 80.7 72.2 [illegible]

RELATIVE HUMIDITY.

	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. *Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of* 6, 9, 12, 3, 6 *and* 9, *from morning till night, based upon daily observations at these hours through the years* 1861 *and* 1862, *at St. Louis, Mo.*

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.
1861	8.6	10.0	9.2	7.9	8.7	6.9
1862	8.9	10.0	9.1	7.3	8.1	6.8

TEMPERATURE.

1861	48.9° F...	54.9	61.6	63.6	59.3	54.3
1862	48.9	55.0	60.9	62.3	58.0	53.6

RELATIVE HUMIDITY.

186	86.4	71.3	60.3	57.2	65.1	77.3
186	5.3	70.6	60.0	57.5	67.6	78.0

Sept. 1861

Nov.....	14	19	21	12	45	19	54	18	W. & N.W.	0
Dec.....	11	17	21	5	34	45	13	38	S., S.E. & W.	4
	112	191	211	230	259	265	351	550	S.E.	50

10017

V. *Positive or Negative Electricity in the Observations of '61 & '62.*

	Positive Electricity.		Negative Electricity.		No Electricity, or 0.		Highest Positive Electricity.	
	1861.	1862.	1861.	1862.	1861.	1862.	1861.	1862.
Jan.....	179	179	3	5		2	40°	40°
Feb.....	162	166	6	2			34	33
March ...	168	179	15	8			30	48
April	157	157	12	22	1	1	33	52
May.....	171	180	17	5	1	3	25	32
June	162	143	5	2	8	20	16	21
July.....	183	153	3	8	1	24	14	11
August..	176	143	5	4	6	40	15	19
Sept.....	169	117	1	1	10	61	18	23
Oct.....	162	143	4	3	20	41	33	35
Nov.... ...	172	157	2	7	6	16	42	42
Dec.... ...	175	166	5	0	6	17	37	35
	2046	1883	78	67	59	225	42°	52°

V

S. crystata 1881

100184

1847

S. graminea?

A. N. Carolina

C. N. Carolina

Sagittaria cristata Eng: Hb. C. E. Faxon

Banks of the Merrimac, Lawrence, Mass

= new Iowa plant

Aug 5th 1879

only one female vertical peduncled

exactly like the Iowa plant

Cornhegus heterophylla Ledge

(= C. submersus & C. pectinatus

Coll Hohenwald, Helena Iowa

10019

Sight with all Strumthola
except possible
divaricata
Digleii

with
parallel
robust
stamen

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-

December; the second with a [illegible] 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.

Febr 1867

Sagittaria graminea

var. gramina angustifolia

acutifolia (phyllodia)

simplex s. lanceifolia

platyphylla, the southern form

I separate from it the

Texas & Mississippi No. 713

plant with shorter stouter

scarcely pubescent peduncles,

longer style —

sub nom. recurva

Lodd. 1822 also 1842 (bulbos)

Drummond. Tex 423

Drummond Herbarium 446 Hook

Hale, Louisiana

probably = my S. platyphylla

and not distinct from graminea

10021

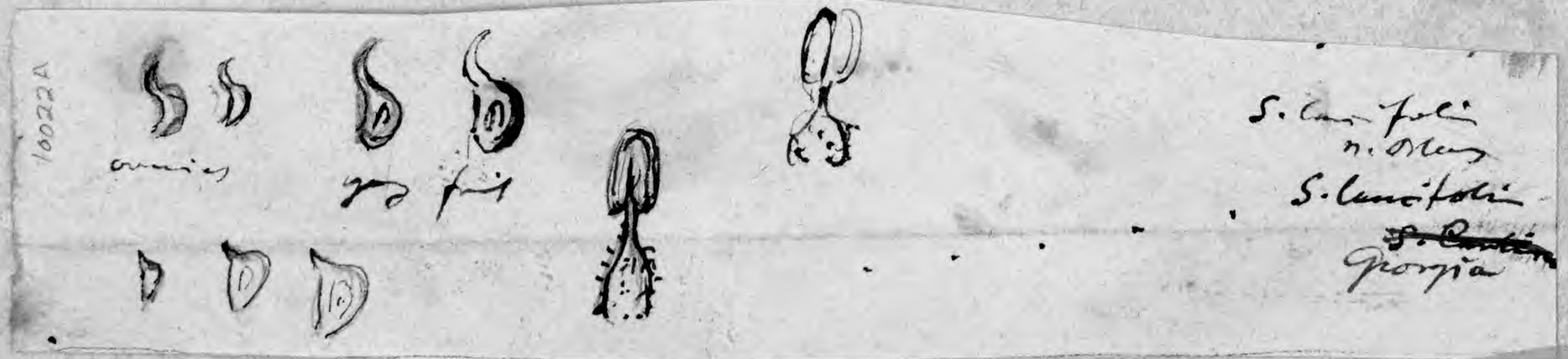
Mrs Schoenthaler abroechnen f.

1849	Jan 22 0
1851	March 15
1852	March 16
1861	Jan 18

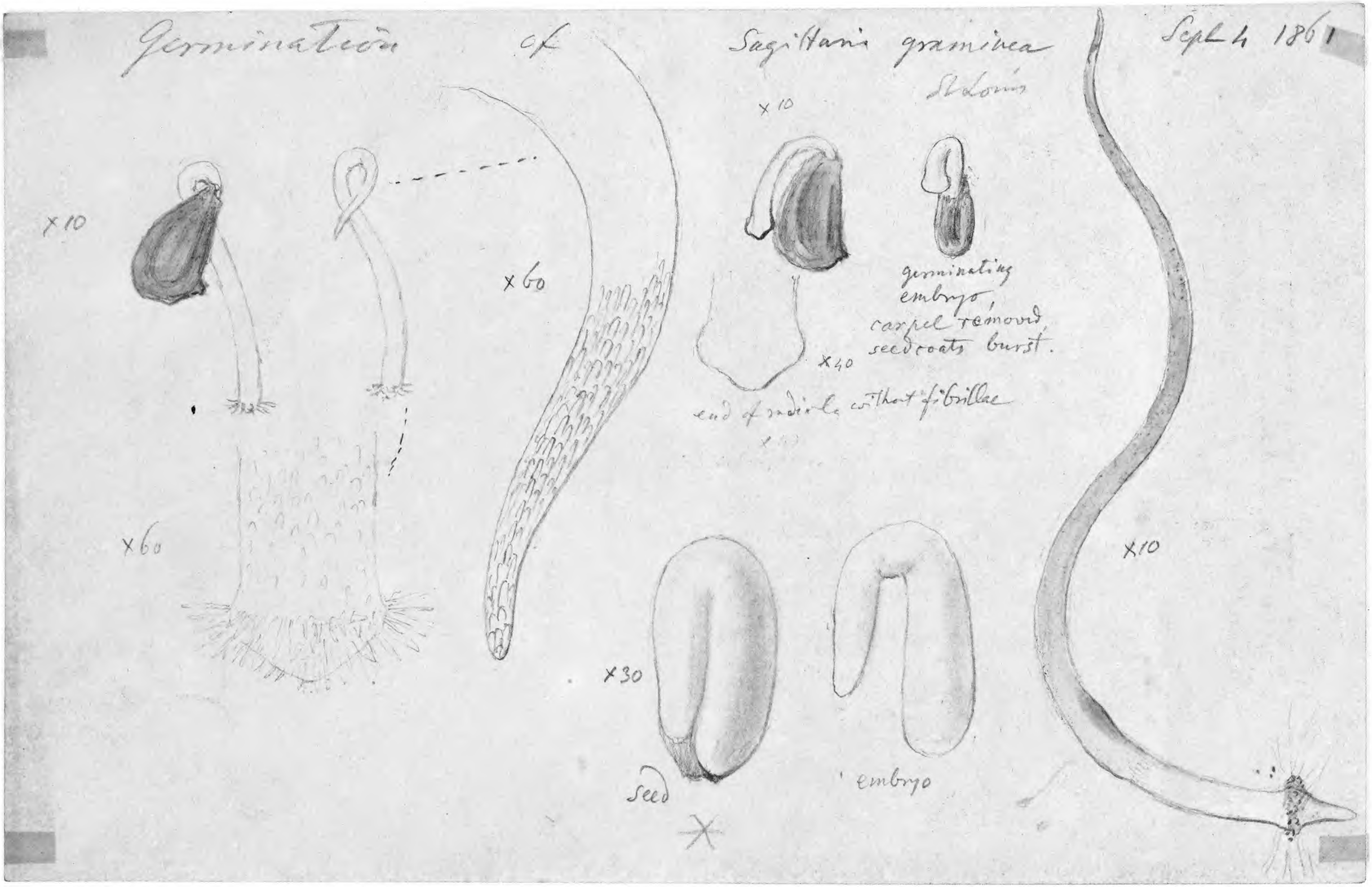
1866.	1303.60
65	218 —
64	5 —
12	98
61.	115.50
	1740 10

S. granulata Mx var platyphylla

1846



10022B



10023

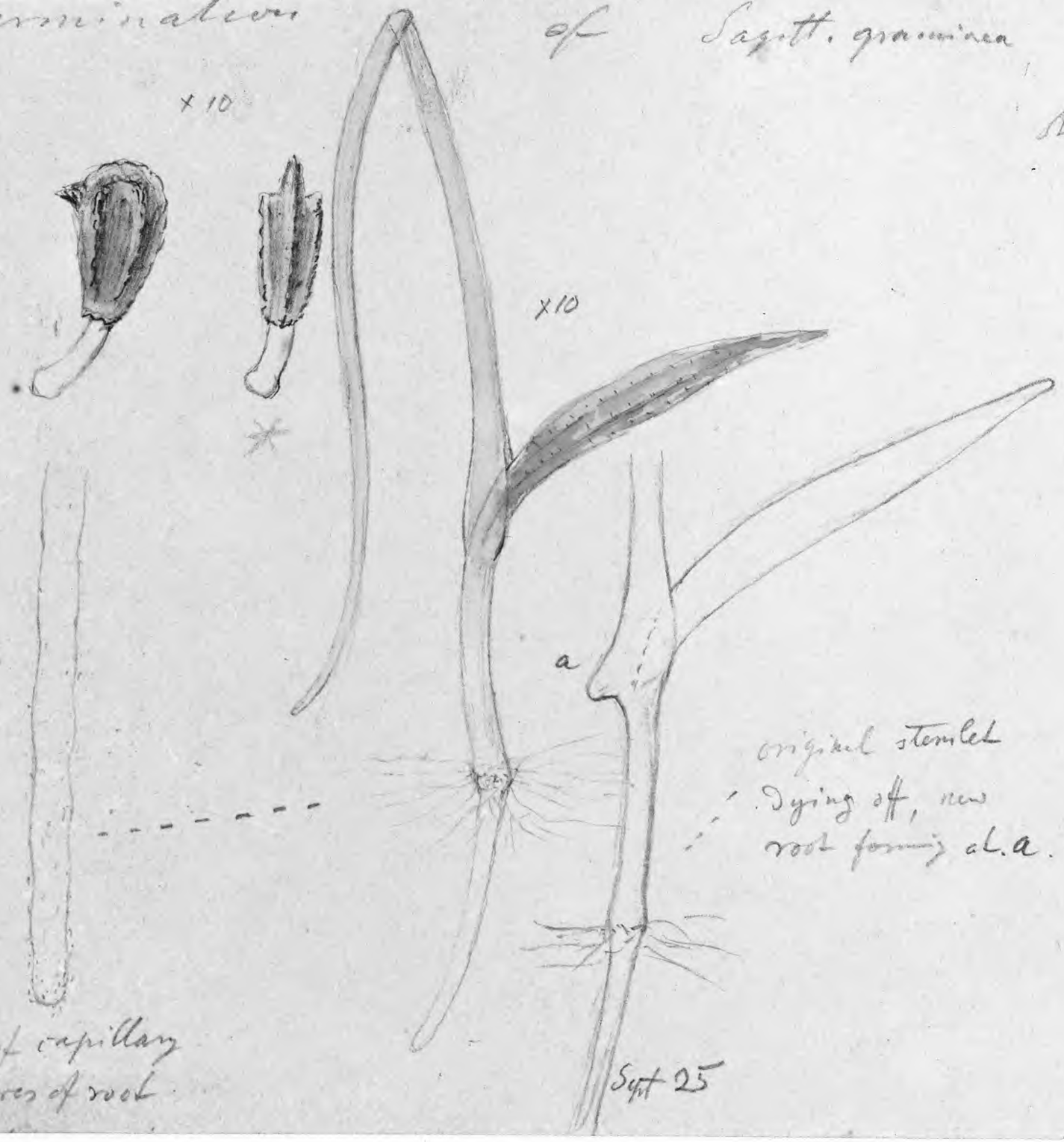
M. W. ALEXANDER,

SOUTH-EAST CORNER FOURTH AND MARKET STREETS,

ST. LOUIS.

Germination of Sagitt. graminea Sept 10th 1861

St Louis



10024

M. W. ALEXANDER,

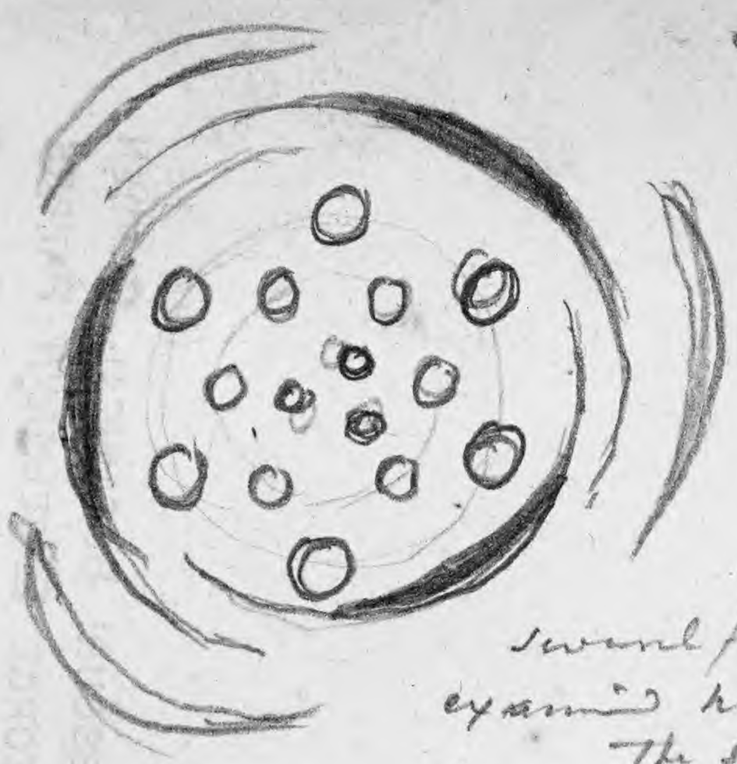
SOUTH-EAST CORNER FOURTH AND MARKET STREETS,

ST. LOUIS.

Sagittaria graminea

St Louis

July 1863



verticills of racreme

3 flowers, alternately

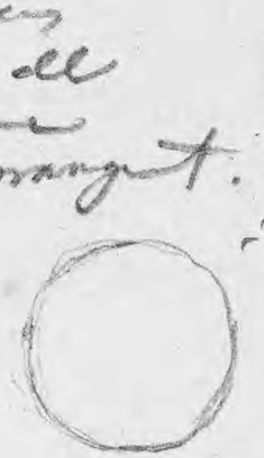
several flowers examined had all the same arrangt.

male fl. 15 stam.

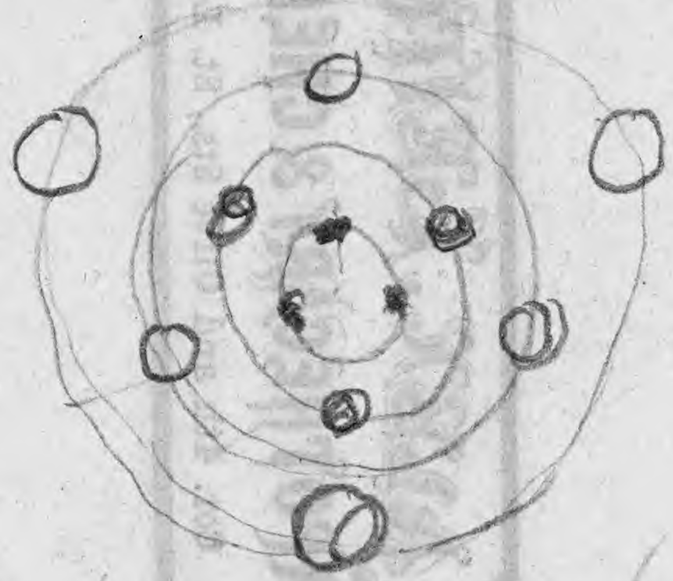
1 circle of 6 stam alternately with sepals & petals!

2 circle of 6 stam. altern. with 1st, & opp. sepals & petals.

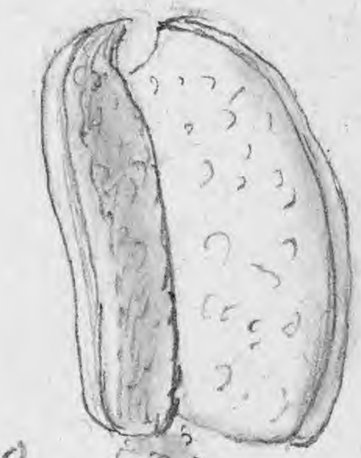
3 circle of 3 stamens. alternating with sepals



Pollen grains X415



racreme



X30

papillae

one celled hairs

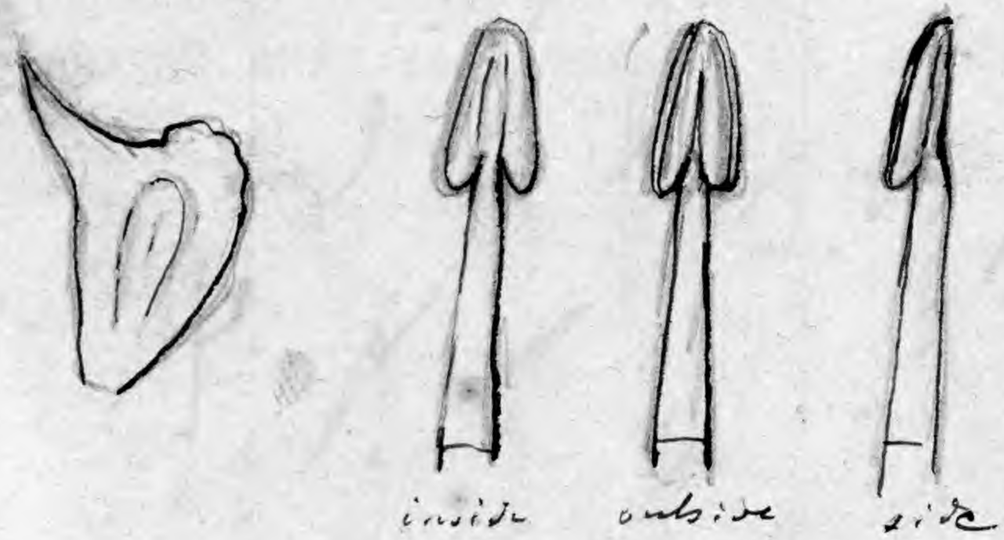
13 stam.

stamen

dorsal view

pollen X415

10025



Chorisanthe Lyonii
Aug 1848

Dimensions.—Length, 0.20 of an inch; width, 0.15.

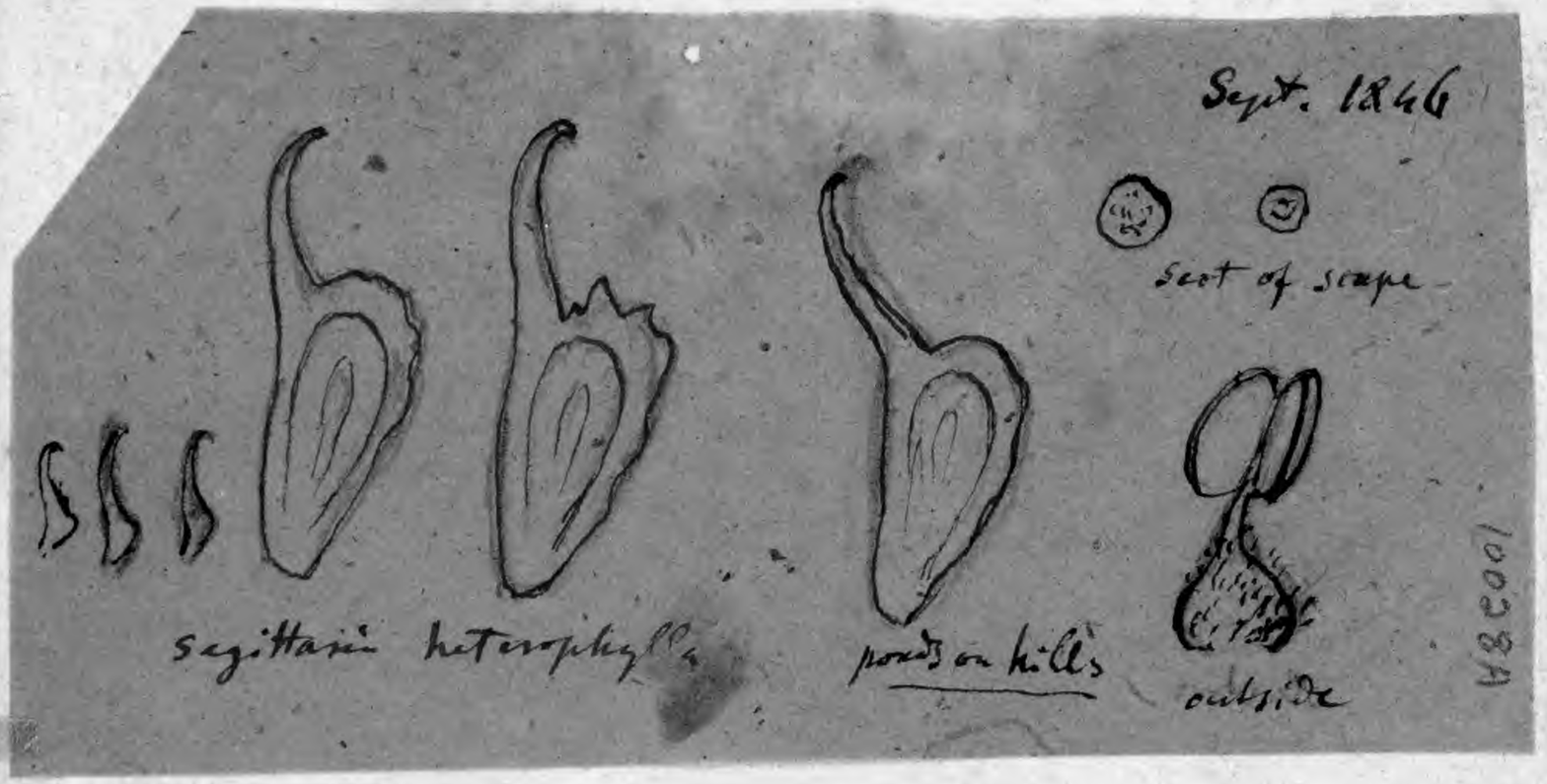
The *Elæacrinus Kirkwoodensis* is nearly allied to *E.* (*Pentremites*) *melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

... of light. They exhibit double refraction quite pl...

The locality of the mineral is near lat. 39° 40′, long. ... 30′ west of Greenwich, west of south of Salt Lake, in Tho... as' range of mountains, on Capt. Simpson's return trail. Circumstances prevented me from obtaining more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.



100283

" S. heterophylla " H. Short

Rethlch. Wolle

is a very slender form

of S. variabilis " male,

1 foot high,

foliis lineari-lanceolatis

v. longissime lineari-hastatis

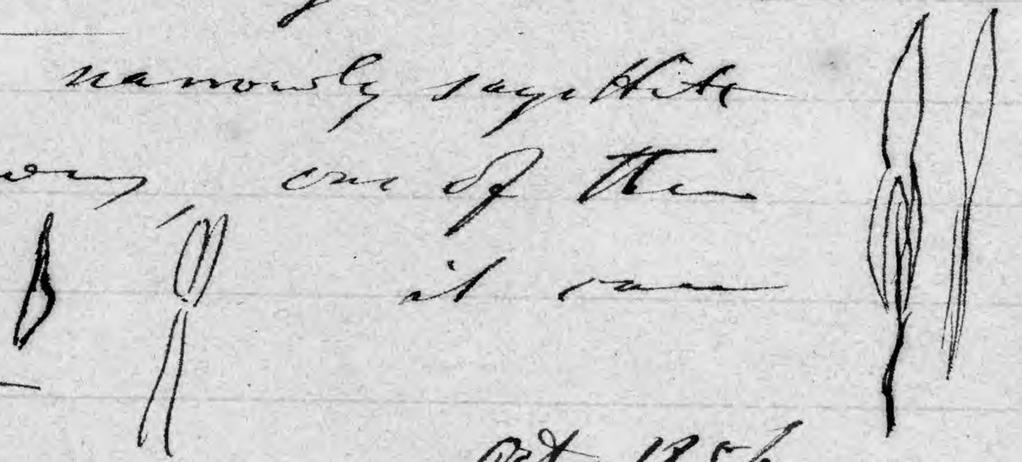
10029

ALEX. LEITCH,

APOTHECARY & PHARMACEUTIST,

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

Dr. Asa Gray is a Sagitt. labelled S. heterophylla from N Jersey, which has narrowly lanceolate linear leaves, and one or two narrowly sagittate ones — but few male flowers, one of them with a few pistils stigmats — it can not be anything but S. variabilis



Oct. 1856

S. tradescantia sepale ? B. Matthes No 278
from Texas
(Can it be a small S. laurifolia ?)
— New Orleans, Drummond, 435 — HH Hook
— Texas Lindh. 182

Matthes' plant 278 — HH Dorrien "is the larger form of this, venation of leaf = laurifolia; calyx & bracts rough —

Drummond, Alabama — HH Hook see notes, HH Hook

10081

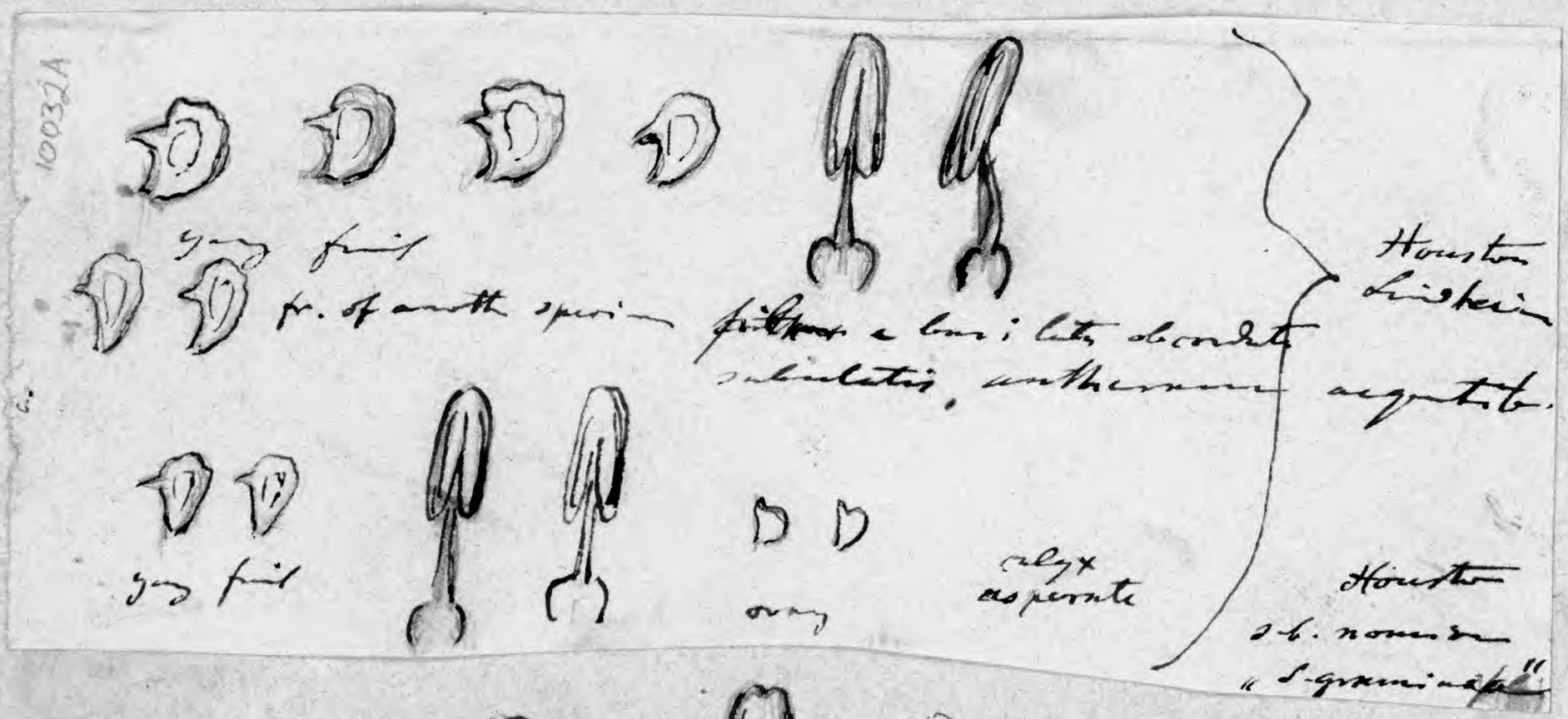
ENNO SANDER & CO,.

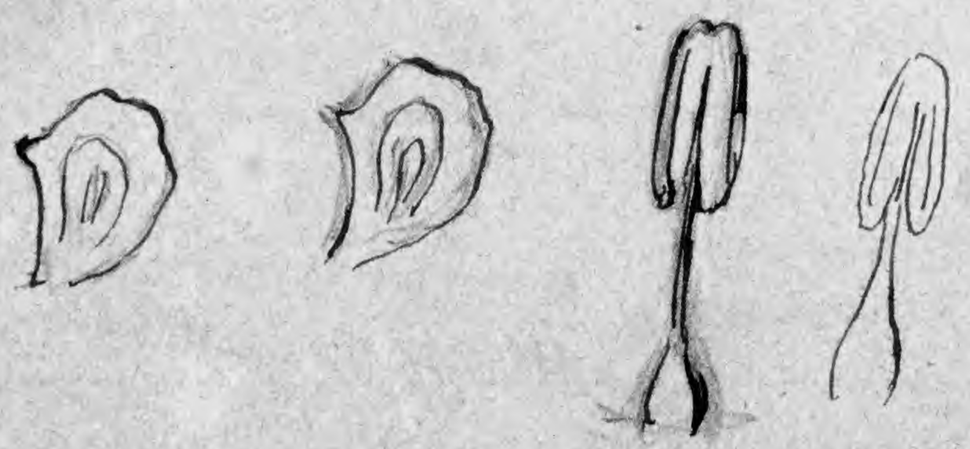
PHARMACEUTISTS,

Cor. 4th & Walnut, under Southern Hotel,
Cor. 2d & Walnut, under Barnum's Hotel,

ST. LOUIS, MO.

Sagitt. Trachysepala n. sp.
allied to S. graminea





Hale County.
*scape elate ramose