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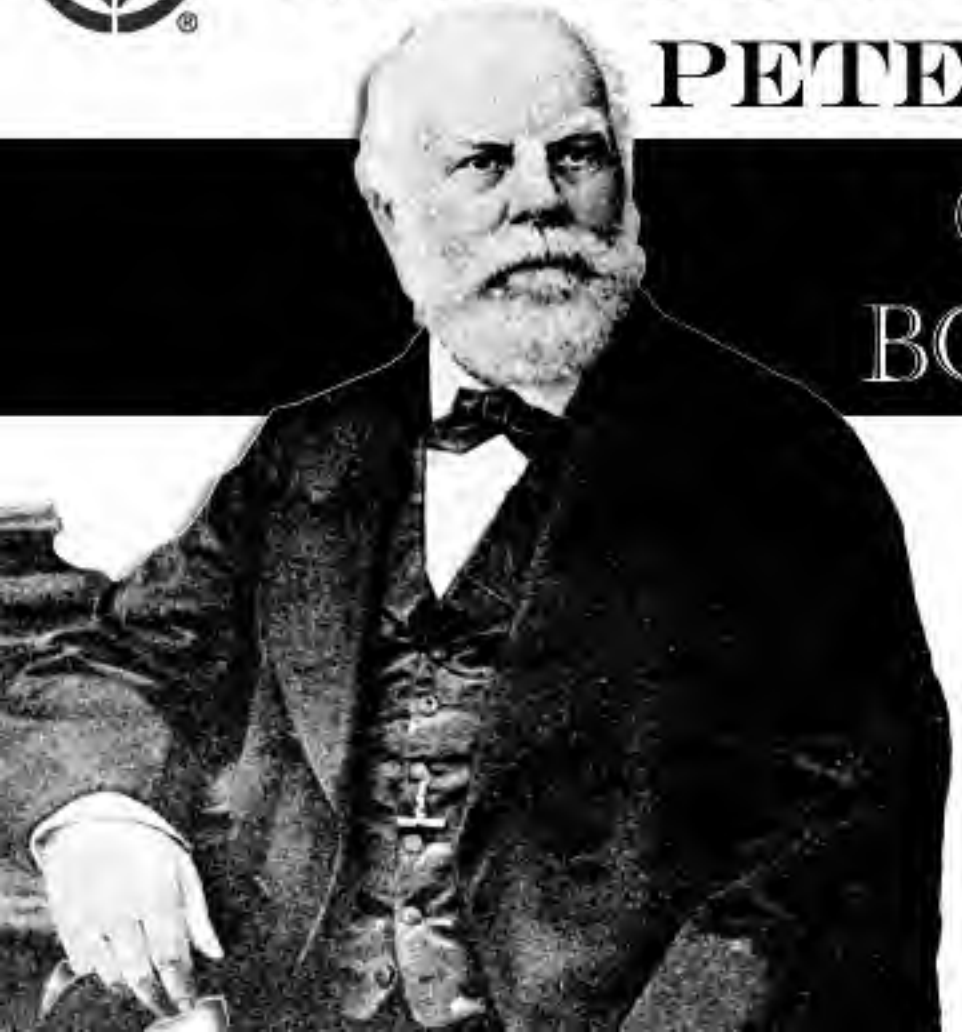

Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Notes on Alismaceae sent to Dr Lapham in Jan 1856 for his Catalogue of Illinois plants.

Alisma Plantago β. Americanum
Echinodorus rostratus E (Alisma r. Nutt
E. radicans E (Alisma Nutt)
E. parvulus E very different from Sagittaria pusilla
Sagittaria variabilis E
α obtusa
β latifolia
γ divaricata
δ sagittifolia
ε angustifolia
ζ. Creasii (Ohio)
S. heterophylla Pursh
elliptica
rigida
angustifolia
~~fluviatilis~~
S. simplex Pursh.

Echinodorus with 6 short exter and 3 longer interior stamens and numerous ovaries with sessile styles

(1) Herb Gray, Ravenel in Still waters SC

Alisma Rostratum looks exactly (leaves, long round, fulcrum, pedicels) like my Sagitt ~~rotundata~~ calycina

Flor Tex 713

Lindheimer (Herb Gray) collected a species in slow streams at New Braunfels, July 47 pedicellis fructiferis recurvis, pedunculis longitudine foliis lanceolatis v. ovato lanceolatis

which must be S. simplex magnum

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Alisma in urbem disposita praeflorali involuta
Echinodorus ~~Ruth~~ L. C. Richard in Mem. Mus. I. 365. subsrata
Sagittaria Char Gen. Engl in Gry Man ed I.

S. variabilis E. in Gr. Man ed I.

S. sagittifolia Lin ex parte Mich. Park Torrey
S. ~~Catesbei~~ folia Willd Spec. 4. 409. auct. fl. Am. bor. omnes Park 2. 396 ster.
S. hastata Park 2. 396.
S. gracilis Park 2. 396.
S. pubescens Muhlenb. Cat 86.
S. obtusa (Poir) Muhlenb in Willd Sp. pl. 4. 409.
S. heterophylla Park 2. 396
S. rigida Park 2. 397
S. Canadensis Lin Amoen 5. 409 & Sp. 1411 (Plum ic. ed Burm t. 116 f. 1. ribbed leaf.
Mich. fl. 2. 189. Angel. Portsmth Va
Elliott. Sk 2.591 Gronovii Sprengel unites Lin & Mich x ~~Park~~ Park agree.
S. falcata Park. 2. 397 — copies only Michaux diagn. without having exam. the plant and judges at the conclusion of the being diffl.
S. acutifolia Lin. Suppl 419 no! ? at least the plant called by Wallschlaegl in Sweden distinct with this name. vide 493 & 1566.
S. Michauxii n. sp. See Seubert
S. gracilis Mich 2. 190 (= S. natans. Hb. Willd. 17560 Muhlenberg misit ?)
S. acutifolia Park. 2. 397. auct. fl. Am. non Lin
A. subulata Lin Sp. 487 for Nutt monente (= S. Purshii Steud. Nom & Pursh Fl. III. 160
S. simplex auct. fl. Am. plurim non Park 2. 397. Ard Lind Tex No 182
S. stolonifera Eng & Gry Pl Lindh. No 183
S. pusilla = Hb. Monac. Bulletin Pa
S. natans Mich 2. 190. (non Pall. S. Lin) ~~Ste~~ auct. fl Am. omnes

S. ~~fluitans~~ marina
terrestris (x herb. No 7115 Dose, Virgin
S. pusilla Nutt. Gen 2. 213 A. subulata Willd Sp. pl 2. 279
Park 1. 253 ! = Echinodorus subulatus ex parte Engl.
(S. pusilla = Chapm Fl. Florid is Echinodorus parvulus
S. calycina C. also Drummond III, 424 Wright. 1849 679
S. gramineus Ell. Off (gramifolia Curtiss = hb. ?)

S. bulbosa Mich = Limnophyseles is a small Sagittaria ?? B. Matthews No 278 Texas

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S. graminea N. Mex. Drummond. 435 see Lib Hook 10136
Tex. Lindh. 182 & 183.
6

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Alisma tenellum Mart is very similar to my Ech. parvulus

if the figure of the former in Fl. Bras is correct it has small orbicular sepals and large obovate rounded petals and 9 stamens 2 opposite to the petals and 1 opposite to the sepals — just the reverse of C. parvulus, which has also obcordate petals

carpels in the figure — one circle! can this be correct? C. parvulum has certainly capitate carpels

carpels globose, nostrate

In my plant the carpels are oblong, narrow, compressed.

leaves veined in the figure

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Alismaceæ

6 Stamens: in 3 pairs, each pair opposite a sepal (Alisma Plantago; Sag. calycina ☿)

9 Stamens; 3 pairs as above, and 3 single ones, opposite the petals (inner circle of) (Echinodorus parvulus Sagittaria calycina ☿)

12 Stamens; 3 pairs as above forming the outer circle and 6 single ones, forming an inner circle, opposite sepals and petals so that altogether 3 stand before each sepal and 1 before each petal (S. calycina ☿)

12 Stamens; 3 pairs, forming an outer circle, opposite the 3 petals, 6 single ones as above, so that altogether 3 stand before each petal and 1 before each sepal. (Ech. rostratus (845)

This is not analogous to the others and perhaps not correct — the foregoing would probably be right.

15 Stamens: 3 pairs before each sepal, 3 single ones before each petal, these 9 forming an outer circle; 6 single ones, forming an inner circle, before sepals and petals; so that 3 stamens are opposite each sepal and 2 opposite each petal. (S. calycina ♂ small flower)

21 Stamens: 6 pairs before sepals and petals forming an outer circle of 12 stamens; inner circle consisting of 9, of which 3 pairs are opposite petals, and 3 single ones opposite sepals (if drawn correctly!) (Echinodorus radicans)

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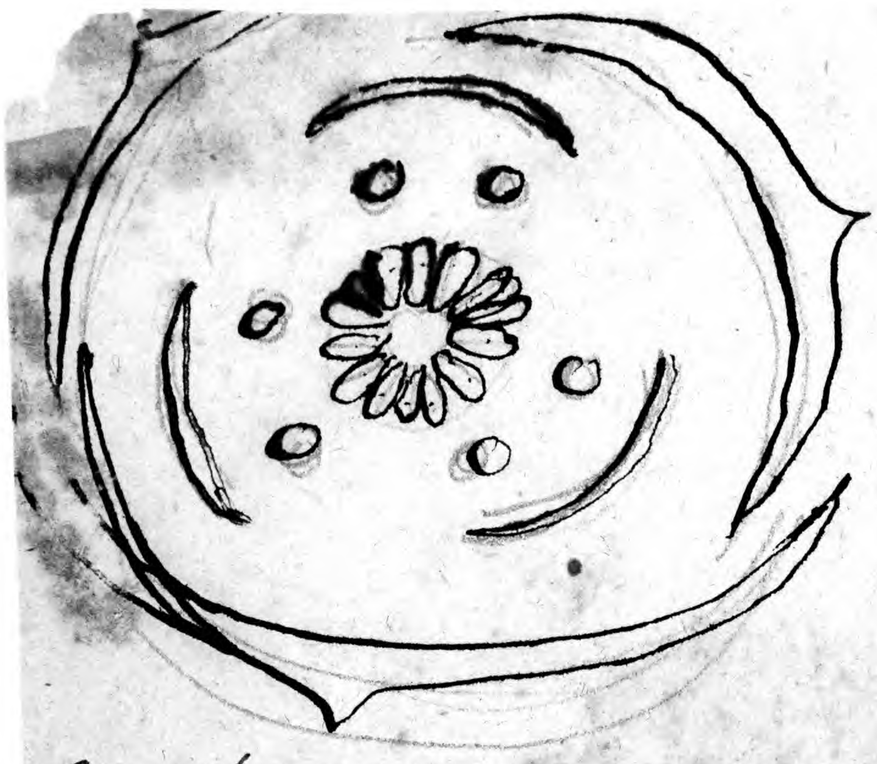
Alisma Plantago ?

St Louis Sept 1845



ovaries 12 – 20

anther. sagitt. dorso affix
lateribus aperientes

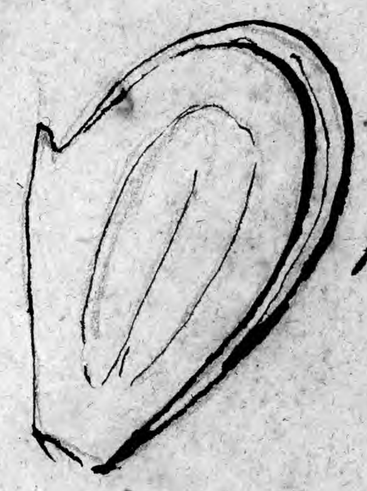
petala angusticora, apice involuta,
non imbricata

Sept 1846

Section of anther before opening

which shows that there is
no difference between this
and Melanthium (probably sagittaria the same

top view of Aug 1847
inside unopened anther



Oct. 1846

Brief on Botan. Alisma fl. herm. pet. invol. stam defin it fruit verticillate capitate

Echinodorus 2 – 3 carinatis dorso dilat.

Melanthi – fl. herm. pet. imbric. stam defin – indef. fruit capitat costat.

Sagittaria. fl monoecs. dioec. pet. imbric, stam indef. fruit capit. dorso alat.

4/12 57

Alisma cal. imbr. corroll. valvata; 6 stam alternate with sepals & petals (not opp to either thereby indicating them to be one circle !?

Echinodorus cal & corroll imbricate.
stam. 6 or more ?
Central is position of stamina – parnassifol.

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H.B.F. 1824

Hungar. Transsylv

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Obtuse Plantago varia pumila Nolle
Holstein has 3 carinate fruit
perhaps = graminifolia Ehrh.

P. arenaria Michalet (Flore de France
par Grenier & Godron Paris 1855.)
has lanceolate leaves & fruit with
style subterminal, & 3 carinate back.
Common about Avignon and probably
in the whole south of France.

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1. Echinodorus parvulus n. sp. (Helanthium pusillum).

annuus, stoloniferus, foliis submersis linearibus, emersis lineari lanceolatis v. ~~elliptice~~ ovato lanceolatis utrinque acutis, penninerviis, scapis folia aequantibus ~~floribus umbellatis~~, umbellis paucifloris simplicibus, subinde foliosis decumbentibus radicantibus; pedicellis longitudine, fructiferis recurvis; ~~floribus longe pedicellatis~~, perigonii foliis interioribus ~~longe~~ obcordatis, stam. 9. stylis ovario brevioribus ~~pedicelli fructi~~ ovario pluries brevioribus

Margin of ponds in the hilly country about St Louis only seen in wet season (August & Sept 1845 abundant 2 ~~4 inches high~~ 1846 it had entirely disappeared!). When overflowed it forms semi transparent linear phyllodia, without any lamina, but generally the leaves are 6 to 12 lines long and from 1 to 6 lines wide; umbels from 3 to 6 or 8 flowered, pedicels 6 - 20 lines long flowers about 3 lines in diameter, I have distributed this plant to Correspondents under the name of Helanthium pusillum, not being aware that the genus Echinodorus would with slight alterations comprise all our species.

2. Echinodorus rostratus (Alisma rostratum Nutt in Hb. Torr.)

annuus, foliis late ovatis obtusis, basi ~~late~~ simulatissime ~~lunatis~~ cordatis v. truncatis; scapo erecto foliis superantibus, ~~foliis floribus~~ verticillato-paniculato multiflora; perigonii foliis interioribus orbiculatis subacutis, stam 12, stylis ovario longioribus; capillis stylo persistentibus rostratis.

Margin of ponds & lakes in rich alluvial soil about St Louis, and from Illinois to Arkansas

Aug. Sept. — Like the former rare in some and very common in other seasons. — Plant from 4 inches to 2 feet high; — the smallest depauperate specimens have lanceolate leaves acute at each end; generally leaves 1 to 2½ inch wide & 1½ to 2½ inch long; — flowers

about 5 lines in diameter; pedicels straight, carpells strongly ribbed, rostrate.

3. Echinodorus radicans n. sp. perennis foliis late cordato triangulari-ovatis, obtusis, basi ~~late~~ sinu latissimo cordatis i truncatis; scapo elongato decumbente radicante (subinde foliifero) v. ramoso, floribus longe pedicellatis, verticillatis stam. 18–21. stylis ovaris multo brevioribus, carpellis numerosissimis, breviter rostratis, dorso carinatis denticulatis

In Lakes, in the bottom lands of the Mississippi near St Louis, and from here to Arkansas & Texas.

Fl. for August to October. — I have seen the plant in the Torrey without name or locality. — petioles often 1 to 1½ foot long; leaves ~~2 to 4~~ from ~~two~~ 3 to 4 inches long and nearly as wide to 8 inches ~~wide~~ long & 7 inches ~~long~~ wide scape often 2 to 4 feet long, ~~lying~~ prostrate over the surface of the water, branching, radicant, producing a profusion of large fine flowers (10 to 15 lines in diameter) and often ~~now~~ bunches of leaves & young plants.+ carpells much more numerous than in the last, but shorter rostrate. —

+ Stamens regularly 21 but often less by abortion a few less

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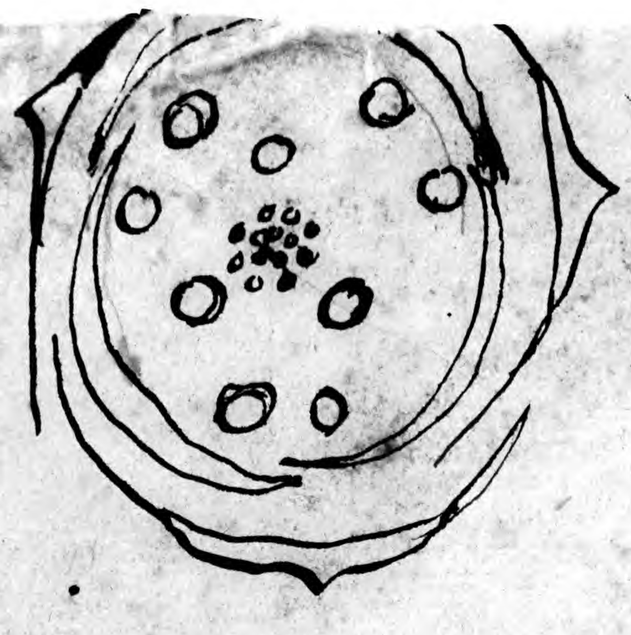
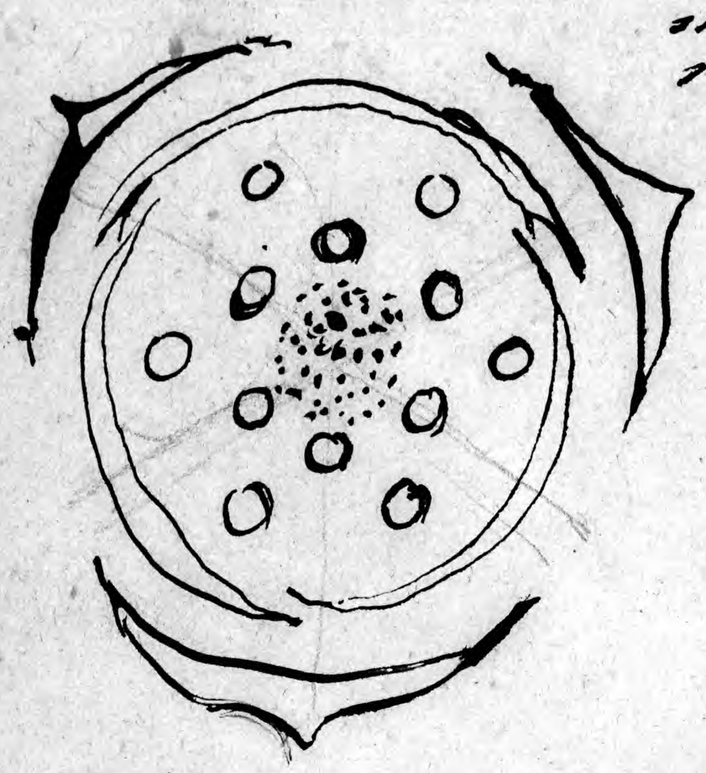


Echin. parvulus
Alisma minus

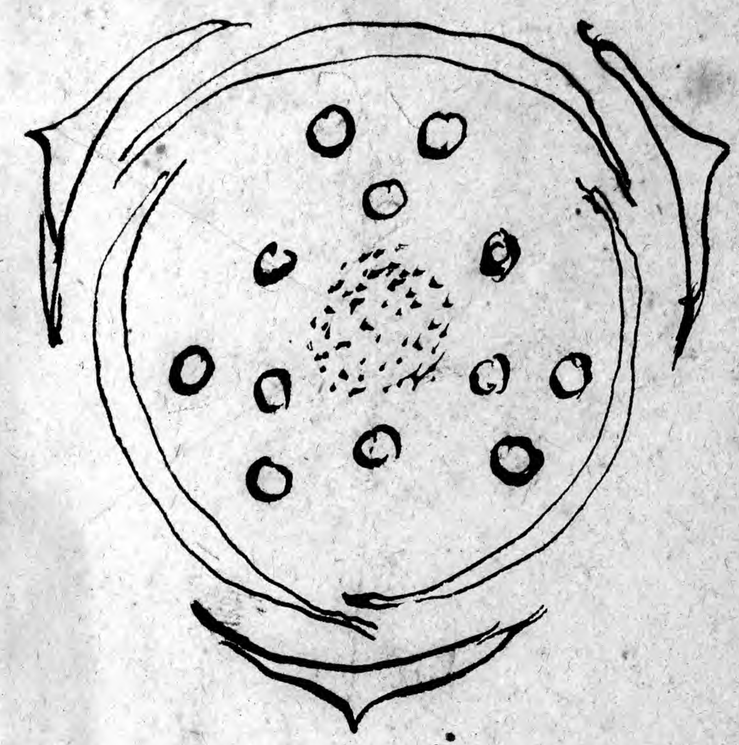
Sept
St Louis 1845

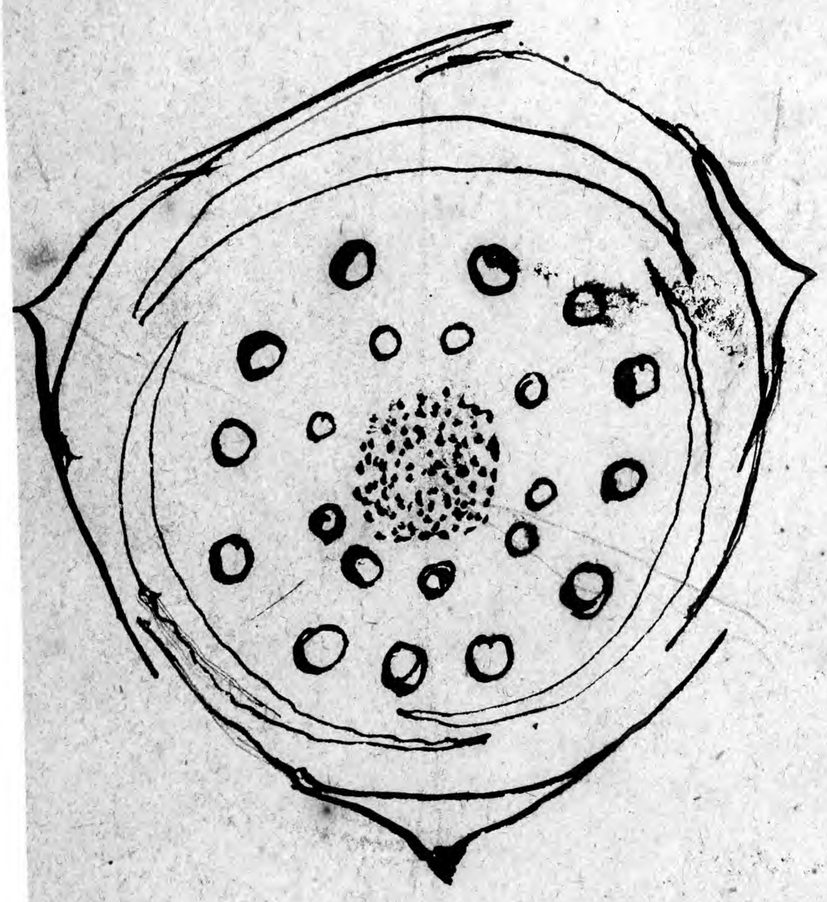
6 outer stamens in pairs
at the base of the petals!
shorter than the inner
stamens



better

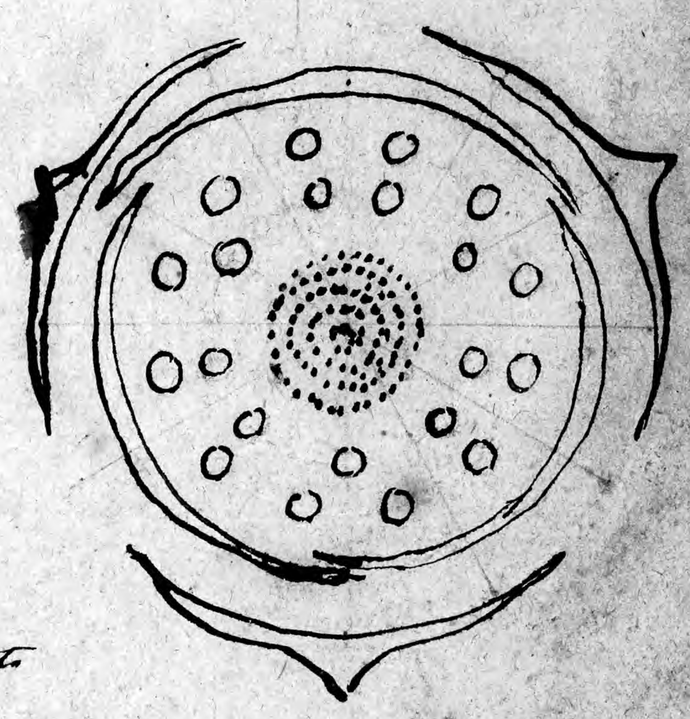
Alisma ~~[illegible]~~
rostratum





12 outer stamens shorter
than the 9 inner ones

Alisma ~~[illegible]~~ sagittaroides
(radicans)
~~[illegible]~~



N.B. fruit. dorso carinato denticulato

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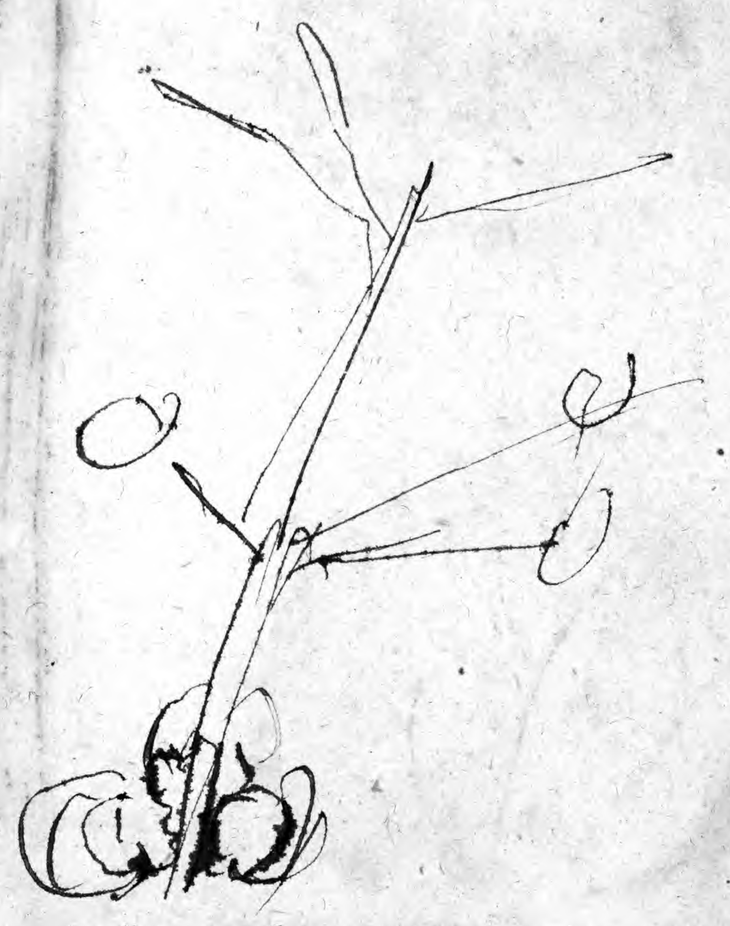

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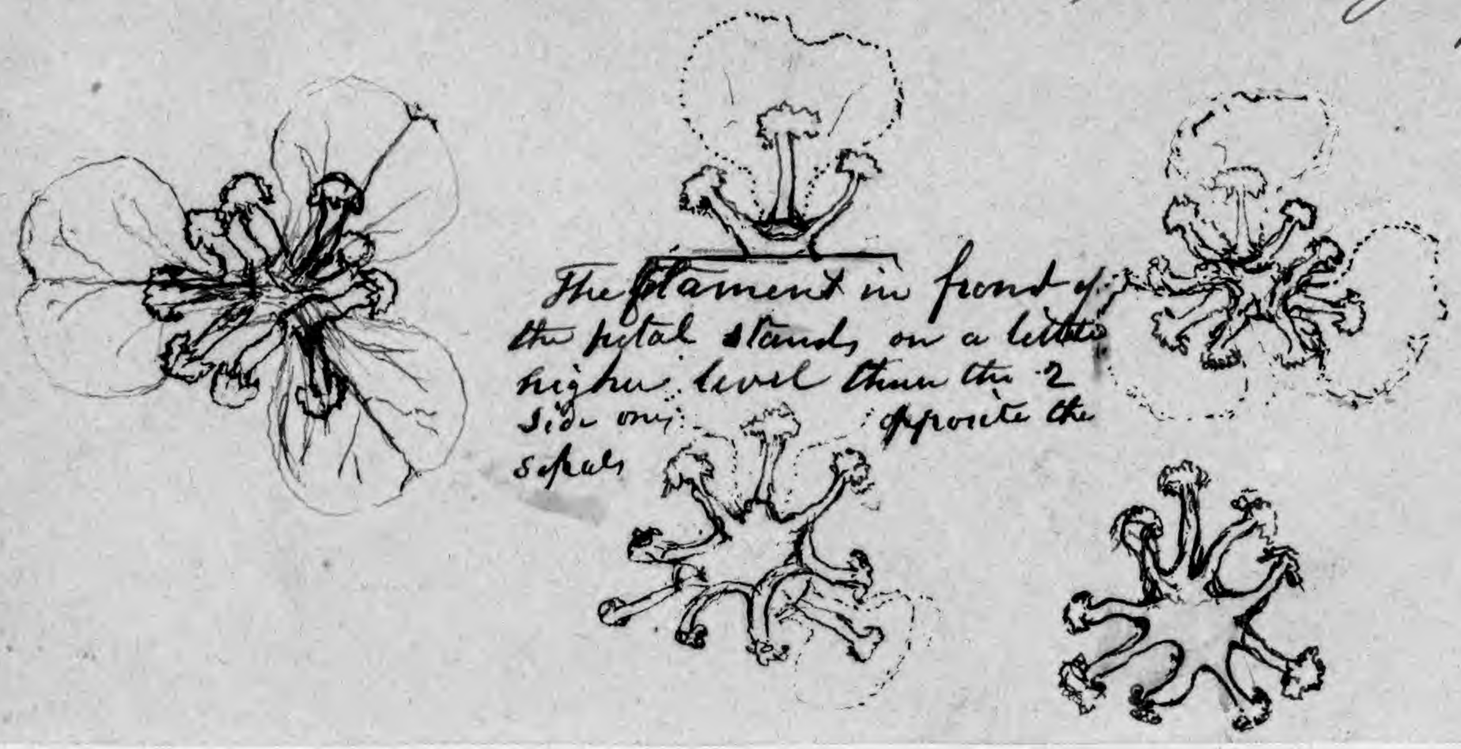
Echinodorus parvulus Cambridge T. P. James 1873



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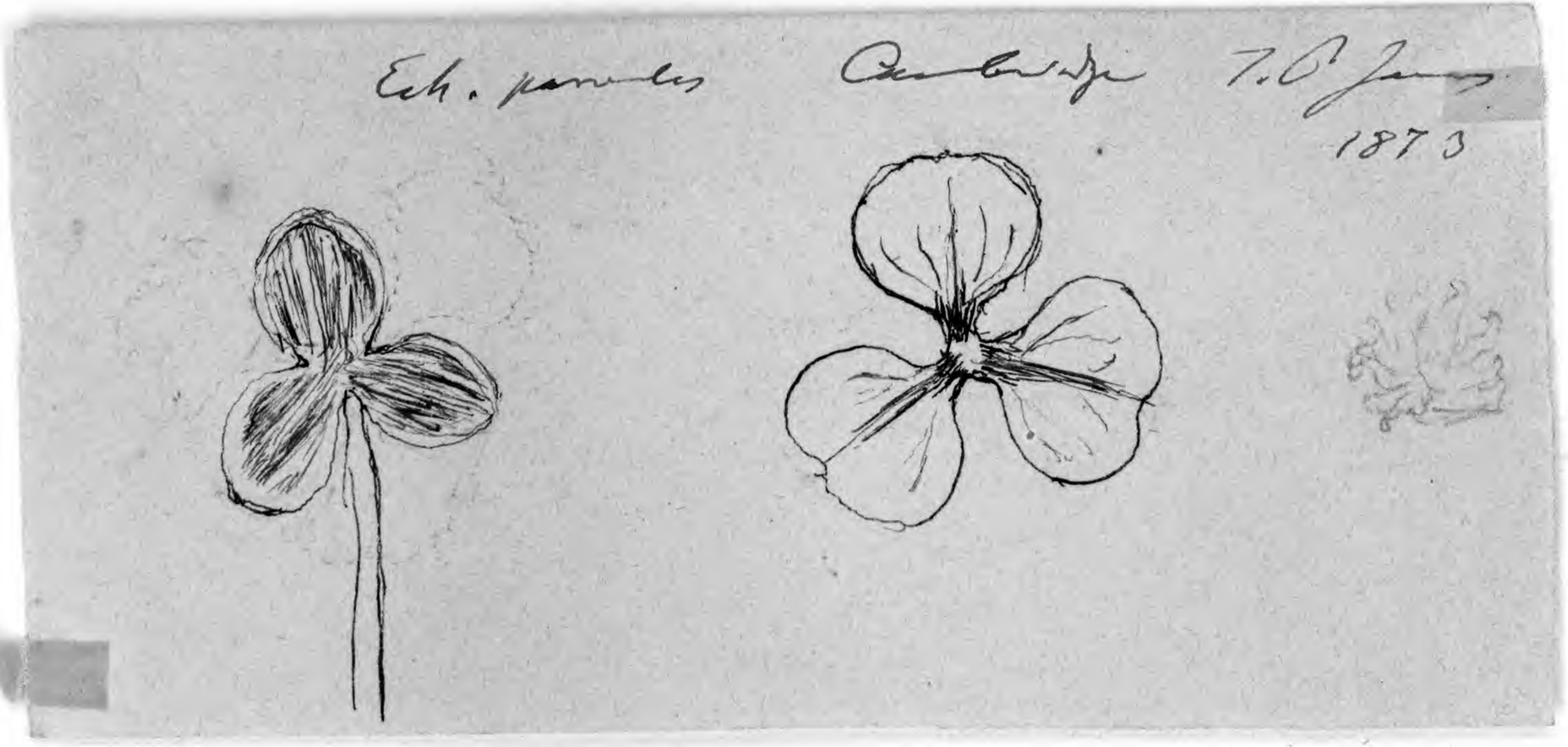

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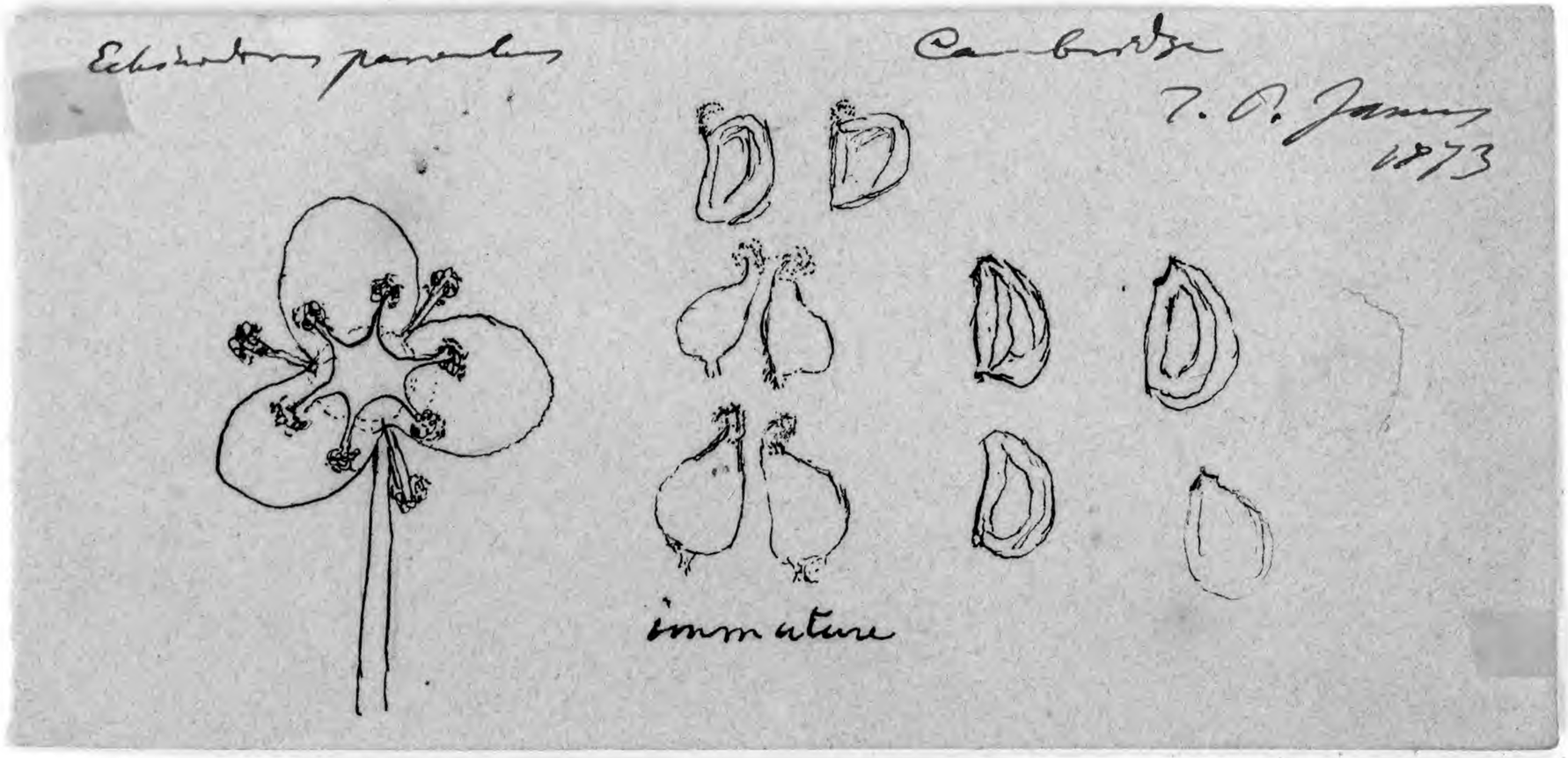

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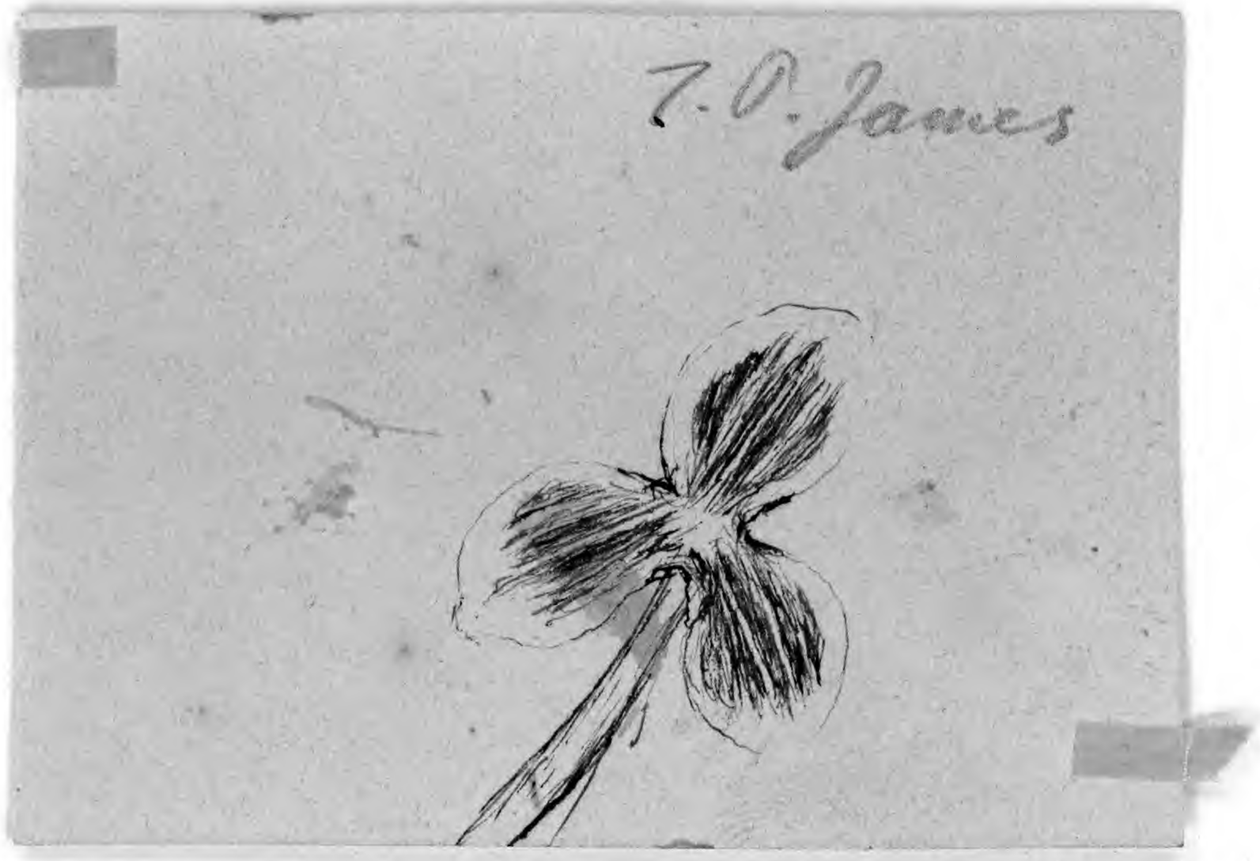

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