

But I cannot help asking your Opinion and begging you to consider, Whether, upon the Whole, the Virtues of this Medicine may not reasonably be thought to extend to many other Cases; and particularly to the Epilepsy and Plague. But, whatever Judgment you may form of the Medicine which common Good-will to my Fellow-creatures obliges me to recommend to your Thoughts, I intreat, and hope, you will pardon my Presumption in going so far beyond my own Province; seeing I shall always be, with the highest Esteem, and sincerest Respect,

Dear Sir,

*Tour most obliged, and
and most obedient Servant,*

Andr. Reid.

XIX. De Planta minus cognita, & hactenus non descripta, Commentarius: Auctore *Guilielmo Watson*, REGIÆ SOCIETATIS Sodale.

GEASTER Volvæ Radiis & Operculo elevatis.

*Read in English
Dec. 20. 1744.
here printed with
Alterations.*

GEASTER appellatur plantarum genus a *Michelio* constructum; cuius quinque species accuratissimus idem auctor detexit, atque in tractatu suo de novis plantarum generibus

generibus adumbravit. Denominatur autem ex idiomate Græco ($\gamma\eta$ terra, & $\alpha\zeta\eta\pi$ stella), propter angulos quosdam acutiores e centro radiatim excurrentes in omnibus hujus plantæ speciebus, eo ritu, quo stellarum conruscationes in pictura effinguntur.

Cum Lycoperdo (a) *Tournefortii* & (b) *Linnæi*, vel Bovista (c) *Dillenii*, cum (d) Lycoperdoide, Lycoperdastro, & (e) Carpobolo *Michelii*, proximam affinitatem obtinet hocce genus. (f) *Linnæus* etiam, necnon in generibus a *Linnæo* datis (laudabili sane instituto) sectator ejus (g) *Royenus*, omnes has plantas sub Lycoperdi nomine generico complexi sunt. Salva tamen reverentia, qua eximios istos in arte botanica viros colam, quorum legibus, in omnium fere plantarum generibus a sola fructificatione firmandis, licet in cæteris partibus minime convenienti, arcte adhæreo; in multis certe tam ex *Linnæi* Cryptogamiis, quam ex *Royeni* Cryptantheris, ad habitum plantarum, etiam in generibus constituendis, spectare oportet; idque in Fungis, Fucis, Algis, forsitan & in Capillaribus, maxime necessarium esse videtur.

Ad descriptionem mirificæ hujus plantæ concinnandam, in tres partes distrahere lubuit, Volvam scilicet, Operculum, & Fructificationem; quas seorsim tradere nunc aggrediar.

Volva (ut non cum *Plinio* tantum, sed & *Clusio*, aliisque recentioribus loquar) concava est, calycis formam repræsentans, cuius diameter sesquipollicem æquat. Lata huic calyci adest basis, e centro cuius, dum

(a) Instit. R. Herb. p. 563. (b) *Linn. Gen. Plant.* p. 510.
 (c) *Cat. Giff.* p. 196. (d) *Mickel. nova Plant. Gen.* p. 221. (e) Ib. id.
 (f) *Linn. Gen.* 510. *H. Cliffort.* p. 479. (g) *Fior. Leidenf.*
Prod. p. 518.

dum adhuc planta adolescat, radiculas fibrosas, raras tamen more gentis, emitit, eidem nutrimentum subministrantes. Cum vero toti huic stirpium familiae humiditas minime sit grata, radiculae una cum volvæ centro, cui erant infixæ, antequam ad maturitatem perveniat planta, marcescunt; qua de causa in basis fundo foramen conspicitur. Volva autem, postquam ad tertiam pollicis partem surrexerit, fit quadrifida, laciniiis gaudens obtuse lanceolatis, ad apices parum reflexis, ad margines vero integris. Huic volvæ vis clastica tribuitur; color externus est cinereus cum superficie inæquali, internus vero lævis & albicans.

A singulis volvæ laciniarum reflexarum apicibus pars plantæ assurgit, quam operculum voco. Ab hoc a commissuris cum volva sensim se extendente, bini conflantur fornices ad angulos rectos intercurrentes, quorum altitudo a volvæ laciniiis sesquipollicem parum superat. Operculi densitas & crassitudo corticem Cinnamomi æmulantur; ad margines nonnihil sese invertit; color introrsum albicat, extrorsum flavo rubescit. His addatur, quod membrana quædam fusca, impariter quadripartita, forniciis utriusque culmini adhæret.

Ex operculi centro jam descripti, pediculo quartam circiter pollicis partem alto sustentatum eminet pericarpium, oblate globosum, colore fuscum, ad pollicis duas partes tertias latum, capitello papaverino æmulum. Foramen circulare hujus pericarpii sumum culmen occupat, in quo cernuntur lamellæ quædam per longitudinem totam intus parietibus pericarpii adnatæ, materia lanuginosa quadam confertæ, quibus tanquam placentis adhærent sub pulveris subtilissimi forma, semina numerosa.

Multis forte rei herbariae scientia imbutis cognitu difficultimum videatur, quibus modis, dum planta adhuc vigeat, operculo & pericarpio idoneum suppeditatur nutrimentum. His igitur notatu dignum sit, quod in plantæ statu teneriore, volva & operculum cum radiis suis humi procumbunt, pīcibus scīlāe marīnāe dīctis haud absimilia, materiaque quadam gelatinosa simul conjuncta, cujus ope u.a cum pericarpio ac semine nutriuntur. In hoc situ dantur omnes Geastrī species a laudato *Michelio* propositæ ; pariter ac *Fungus Crepitus Lupi dictus coronatus & inferne stellatus*, ab egregio (a) *Rai* nostro primum memoratus, cujus in tertia Synopseos Stirpium Britannicarum (b) editione icona exhibetur. Maturo autem semine, gelatinosa materia quæ volvam & operculum intercurrit jam arescit. Hinc rigida fiunt & elastica ; qua de causa, si contactus ad laciniarum apices demas, divisa cernuntur. His ita effectis consurgunt sensim volvæ radii, operculum, & fructus, turriculamque forniciatum tota planta proxime repræsentat. Hic ratio-cinandi modus (crescentem enim perscrutandi facultas nemini adhuc fuit concessa) vix ullum dubium admittit ; cum non fabulum tantum, sed etiam lapillum, hoc ipso tempore conspicuum, complectitur volvæ tunica exterior rugis obsita. Quin auctoritate etiam *Michelianā* certiores facti sumus, (c) *Car-pobolum* (Geastro, ut supra dixi, valde affinem) non operculum tantum ex cavo ad convexum sublevare posse, momento vero temporis ea violentia hoc effici, ut fructum suum parvum ac globosum in a.tum ejaculetur.

Hajus

(a) *Raii* Synopf. Edit. 2d. p. 16.
nova Plant. Gen. TAB. 101.

(b) TAB. I.

(c) *Michelia*

Hujus plantæ exemplaria duo, nec plura videre contigit, communicavit mecum amicitia conjunctissimus *Robertus Nicholls* pharmacopæus *Londinensis*, primi subsellii botanicus; cuius non tantum ardorem, sed etiam ingenium scientiam naturalem promovendo, multoties ipse fui expertus. Majus horum, haud procul a *Reading*, — *Merrick*, M. D. collegit; minus vero prope *Wickham* in agro *Cantiano* nascebatur. Sub *Martii* mensis finem ambo provenerunt.

TAB. II. *Fig.* 11.

- A.* Pericarpium.
- B.* Operculum.
- C.* Volva.

Fig. 12.

- Pericarpium antice visum; cuius
A. Foramen circulare.
-

ERRATA.

In *Page* 198, *Line* 13. for *Abductores* read ~~Ad~~
ductores. *P.* 172, *l.* 28. for *b*, read *ib.* *P.* 200, for
XV. read *XVI.* *P.* 225, for *Alex.* read *Andr.*

Fig. 1.

p. 158.

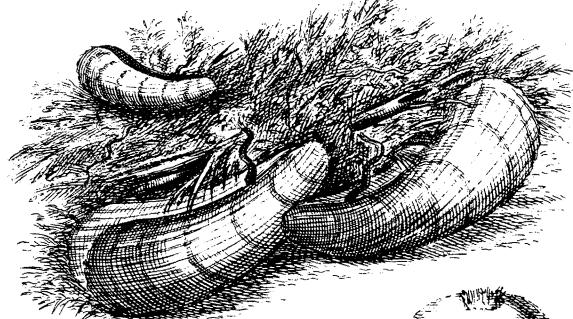


Fig. 11.

p. 238.

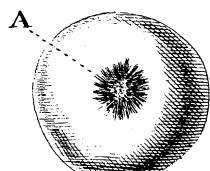


Fig. 12. p. 238.

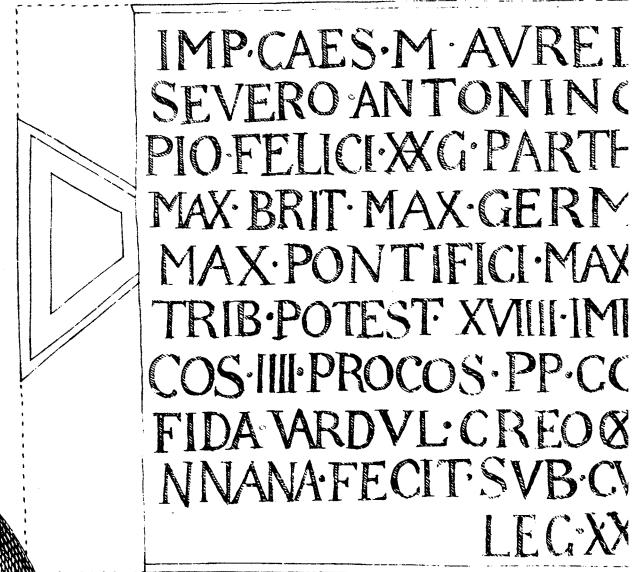
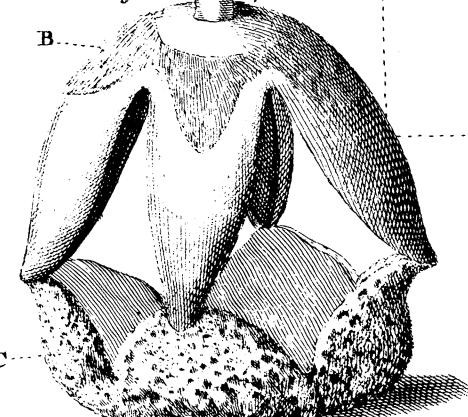


Fig. 2. p. 160.

Fig. 10. p. 208.

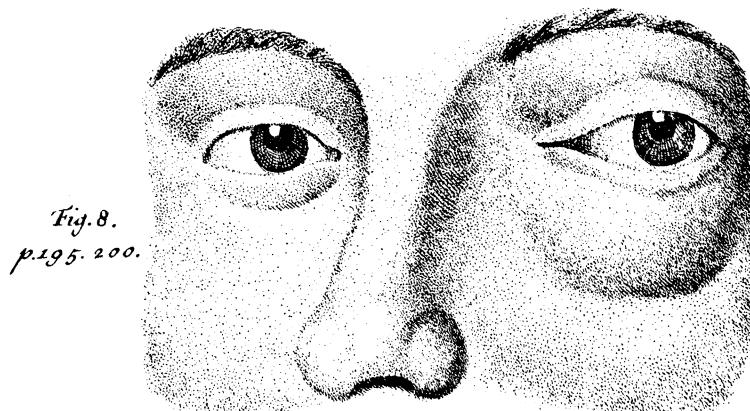
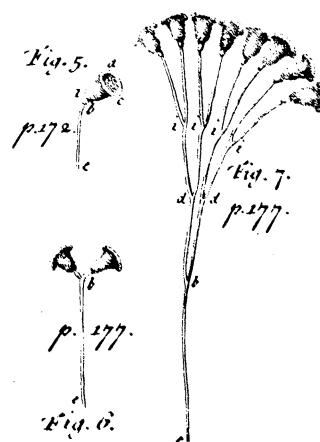
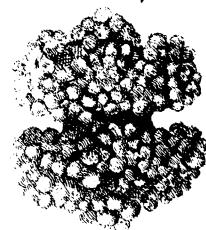


Fig. 8.
p. 295. 200.



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ARTHIC
ERM.
·MAXIM.
H·IMP·II·
P·COH·I·
EO&ANO
B·CURATO
GXXGR

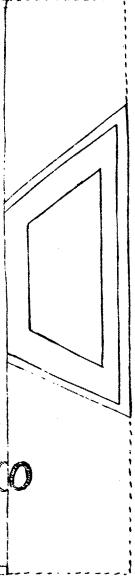


Fig. 3. p. 160.
MARTI
VICTORI
VLIVS LI
IVS TRIB
V·S · L· M.

Fig. 4. p. 160.
FORTVNAE
AVG
A E T
PROCVLINA
VS

Fig. 5. p. 201.

DEO·HER
SAEG ON
TTAMMON
SAEVAMMON
VITALIS
HOND

Fig. 1.



p. 158.

Fig. 2. p. 160.

IMP·CAES·M·AVRELIO
SEVERO ANTONINO
PIO·FELICI·XXXG·PARTHIC·
MAX·BRIT·MAX·GERM·
MAX·PONTIFICI·MAXIM·
TRIB·POTEST XVIII·IMP·II·
COS·III·PROCONS·PP·COH·I·
FIDA·WARDVL·CREO·ANO
NNANA·FECIT SVB·CVRA·Ko
LEG·XX·GR

Fig. 3. p. 160.

MARTI
VICTORI
VLIVS LI
IVS·TRIE
VS·L·M.

Fig. 4. p. 160.

FORTVNAE
AVG
A E T
PROCVLINA
V S

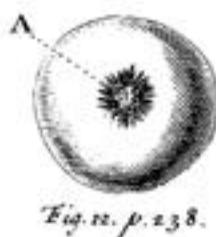


Fig. 5. p. 238.

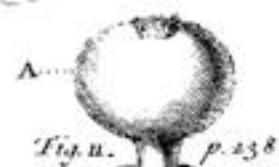


Fig. 6. p. 238.



B.

C.

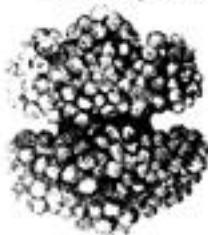
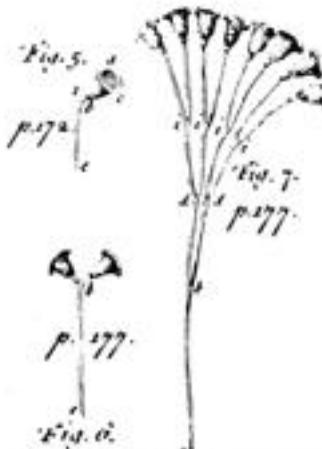


Fig. 10. p. 208.



D.

E.

F.

G.

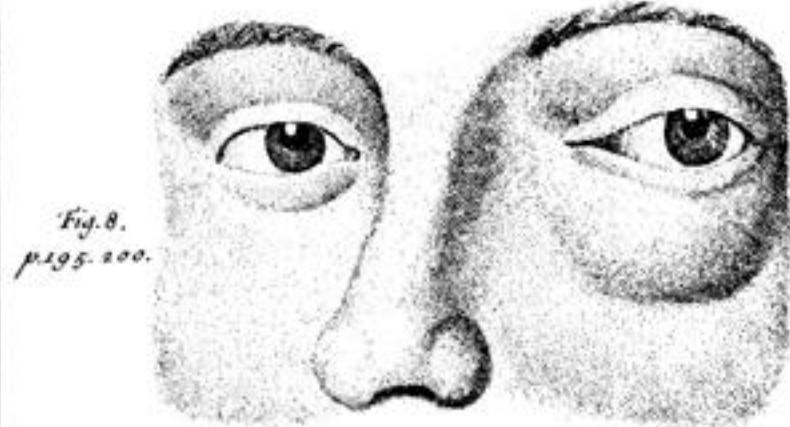


Fig. 8.
p. 195. 200.

Fig. 9. p. 201.

DEO·HER
SAEG ON
T·TAMMON
SAE·TAMMON
VITALIS
HONG