

Lunæ ad fixas Appulsus, *Derbia* Anno 1674. observabiles, ab Ephemeride Doctissimi D. Heckeri deducti, & brevibus notis descripti à J. Flamsteadi.

1673.

Januarii.

6. $4^h\ 53'$ p.m. Luna in $\textcircled{3}$ $14^\circ\text{-}00'$ latitudo Septentr. $5^\circ\text{-}16'$. Fixæ ibi $4^\circ\text{-}08'$ horoscopus $\textcircled{1}$ 6. Ergo tunc Luna fixam sub Austrino limbo teget, vel modico ab ea intervallo distabit.

7. $16^\circ\text{-}07'$ \textcircled{D} in \textcircled{II} $3^\circ\text{-}37'$. latitudo $4^\circ\text{-}50'$; fixæ $3^\circ\text{-}57'$ Sept. horoscopus $\textcircled{1}$ 4° . Ergo Luna occidit priusquam fixam asequatur, à qua tamen, cum eadem visibili ferè latitudine occasura, limbis ejus orientalis distabit summum $15'$ (scrup.

10. $4^\circ\text{-}32.$ \textcircled{D} in \textcircled{V} $9^\circ\text{-}37'$ latitudo $2^\circ\text{-}36'$ Sept. fixæ $1^\circ\text{-}31'$ oriente $\textcircled{1}$ 6° . Ergo luna limbis Australius paulò ante Solis occasum vel fixam tanget, vel modico interposito intervallo præter-transbit.

11. $5^\circ\text{-}12.$ \textcircled{D} in \textcircled{V} $25^\circ\text{-}00'$ latit. borea $1^\circ\text{-}07'$. fixæ $1^\circ\text{-}15'$ horoscopus $\textcircled{1}$ $14^\circ\frac{1}{2}$: Ergo lunæ limbis boreus, semihorâ circiter ante Solis occasum, transit ferè $30'$ infra fixam.

Eadem nocte $17^\circ\text{-}14'$ p.m. digiti $9'$ cum parte digiti tertia lunaris corporis obscurantur; & deinceps, horâ nim.

$19^\circ\text{-}33'$, Luna erit in $\textcircled{1}$ $4^\circ\text{-}11'$ cum latitudine Boreæ $0^\circ\text{-}28'$. Fixæ ibi latitudo est $0^\circ\text{-}04'$ merid. Propterea tunc Luna limbis orientalis in eadem cum fixa Azimutha conspicietur, cuius limbis proximus ab ea distabit.

$16'$ circiter: utilius phainomenon; quippe vix ab umbris terre Luna liberabitur, cum ejus ab hac fixa distantia, tubis capacioribus commode mensurari possit. Vigilate bene instruti Calispices.

12. $19^\circ\text{-}27.$ \textcircled{D} in \textcircled{I} $18^\circ\text{-}54'$. latitudo Sept. $1^\circ\text{-}07'$. fixæ $1^\circ\text{-}15'$ horoscopus $\textcircled{2}$ 22° . Luna ergo, circa Solis ortum eandem cum fixa longitudinem asecure, limbis Australius ab ea distabit scrupulos circiter $30'$.

29. $6^\circ\text{-}37.$ \textcircled{D} in \textcircled{X} 22.08 Lat. Sept. $3^\circ\text{-}36'$. fixæ $3^\circ\text{-}25'$. horoscopus \textcircled{IX} 11 . Ergo sub occasum \textcircled{D} hora $7^\circ\text{-}50'$. fixa erit aliquantulum in antecedentia centri Luna & limbo boreo borealior.

Februarii.

2. $11^\circ\text{-}57.$ \textcircled{D} locus $\textcircled{3}$ $14^\circ\text{-}00'$. latitudo ejus $5^\circ\text{-}14'$ bor. fixæ lat. $4^\circ\text{-}08'$. horoscopus $\textcircled{1}$ 9. Ergo luna occasura dimidium gradūs in antecedentia fixæ cum tanta majori latitudine conspicendi.

3. $9^\circ\text{-}19'$. Luna cum lucida Pleiadum latitudinem habet $5^\circ\text{-}03'$. Sept. oriente $\textcircled{1}$ 2: quamobrem post sesquihoram borealiores Pleiadum medio corpore & limbi obscuri abscondet, sed occidentalem, lucidam, & in cuspide ad ortum illibatus prætertransbit.

6. $07^\circ\text{-}39'$. Luna in \textcircled{S} $5^\circ\text{-}25'$ latitudo $2^\circ\text{-}54'$ Sept. fixæ $2^\circ\text{-}14'$ horoscopus $\textcircled{2}$ 27. Ergo luna circa $7\frac{1}{4}$ p.m. fixam abscondet lucis tertiae in Australi parte limbi obscuri.

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11. $6^{\text{h}}\cdot48'$. D^{x} in M $19^{\circ}\cdot44'$. *latitudo* $3^{\circ}\cdot24'$. *Aust;* *fixa* $3\cdot47$. *horoscopus* $\text{m} 21\frac{1}{2}$: *propterea limbus Luna orientis, fixa proximus in consequentia ejus* $3\frac{3}{5}$ *saltus* *scrupulos* *conspicetur.*
13. $10^{\text{h}}\cdot4'$. D^{x} in M $21^{\circ}\cdot38'$. *lat.* $5^{\circ}\cdot00'$; *fixa* $6\cdot16$ *Meridionalis;* *horoscopus* $\text{m} 3$: *propterea luna orientis limbus proximus distabit circa* $40'$ *scrupulos.*
16. $17^{\text{h}}\cdot07'$. D^{x} in F $5^{\circ}\cdot56'$. *latitudo* $4^{\circ}\cdot39'$; *fixa* $5^{\circ}\cdot50'$ *Australis;* *horoscopus* $\text{m} 27^{\circ}$: *Luna propterea aliquantulum in consequentia fixa videbitur, à qua tamen limbus ejus australior band longè distabit.*

Martii.

3. $6^{\text{h}}\cdot07'$. D^{x} in II $3^{\circ}\cdot04'$. *latitudo* $4^{\circ}\cdot23'$; *fixa* $3^{\circ}\cdot57'$ *Sept.* *horoscopus* $\text{m} 27$. *Ergo luna circa horam septimam superiori parte limbi obscuri subteget fixam.*
15. $13^{\text{h}}\cdot37$. D^{x} in m $28^{\circ}\cdot28'$. *latitudo* $4\cdot41$; *fixa* $5^{\circ}\cdot22'$. *horoscopus* $\text{m} 24$. *Ergo luna sub ejus occasum, superiori parte limbi lucidi assequitur fixam lucis tertiae.*

Aprilis.

3. $7^{\text{h}}\cdot19'$. D^{x} in S $25^{\circ}\cdot00'$. *latitudo* $0^{\circ}\cdot56'$. *Sept;* *fixa* $1^{\circ}\cdot15'$. *horoscopus* $\text{m} 29$. *Luna propterea tunc in eadem cum fixa fere longitudine, limbus boreus ab ea distabit* $34'$ *summum.*
9. $7^{\text{h}}\cdot29'$. D^{x} in M $21^{\circ}\cdot38'$. *latitudo* $4\cdot50$ *Aust;* *fixa* $6\cdot16$. *horoscopus* $\text{m} 5$. *Ergo luna orientis limbus inferior à fixa distabit* *saltus* $30'$.

Maii.

22. $15^{\text{h}}\cdot29'$. D^{x} in S $15^{\circ}\cdot00'$. *latitudo Sept.* $5\cdot00$; *fixa* $4\cdot08$. *horoscopus* $\text{m} 5$: *propterea luna oriens fixam medio limbi lucidi occupabit.*

Julii.

3. $10^{\text{h}}\cdot07'$. D^{x} in F $5^{\circ}\cdot15'$. *latitudo Australis* $4^{\circ}\cdot17'$; *fixa* *Antaris* $4^{\circ}\cdot27'$. *horoscopus* $\text{m} 17$. *Ergo luna limbus altior transit;* o *saltus* *infra Antaren, hora* $10\frac{1}{2}$: *Et sesquihora post, luna occidentis limbus transit fere* $30'$ *supra sequentem fixam in* F $5\cdot56$. *cum latitudine aust.* $5\cdot50$.

20. $14^{\text{h}}\cdot2'$. D^{x} in S $9^{\circ}\cdot37'$. *latitudo* $1^{\circ}\cdot46'$; *Sept. fixa* $1^{\circ}\cdot31'$. *oriente* S $13\frac{1}{2}$. *Ergo luna recens exorta stellam aliquantulum prætergressa est, à qua tamen limbi vel cornu lucidi distans, satis forsitan commodè capi potest.*

Augusti.

8. $8^{\text{h}}\cdot59'$. D^{x} in K $22^{\circ}\cdot08'$. *latitudo Sept.* $4^{\circ}\cdot08'$; *fixa* $3\cdot25$ *punctum oriens* S $3\frac{1}{2}$: *Ergo luna paulo post* 8° . *borealis parte limbi lucidi conserget fixam.*

12. $16\cdot27$. D^{x} in S $14^{\circ}\cdot00'$. *latitudo* $5^{\circ}\cdot03'$. *bor;* *fixa* $4^{\circ}\cdot08'$. *horoscopus* $\text{m} 25$ *quamobrem circa 17 hor. luna limbus australinus transibit paulò supra fixam.*

13. $14^h - 33'$. luna in $\odot 25^\circ - 28'$. latitudo $4^\circ - 41'$. Pleiades $4^\circ - 00'$. punctum oriens $\Omega 5\frac{1}{4}$. Propterea circa 13 hor. luna medio limbi lucidi abscondet occidentalem lucidiorum, & circa 14 hor. ipsam lucidam, media nimurum inferioris limbi lucidi quadrantis.

16. $15^h - 24'$. Δ^* in $\odot 5^\circ - 25'$. latitudo $2^\circ - 07'$. bor; fixa $2^\circ - 11'$. horoscopus $\Omega 17\frac{1}{2}$. Ergo luna limbis superior transit $30'$ circiter infra fixam hor. $14\frac{1}{2}$.

Septembris.

4. $18^h - 09'$. Θ^* in δ Solis in $\times 22^\circ - 08'$. latitudo $4 - 06'$; fixa $3^\circ - 25'$. Sept. horoscopus $\Omega 25\frac{1}{2}$. Ergo ante occasum suum luna abscondet fixam, infra lineam, per centrum ejus. Eclipticae ductam parallelam.

23. $6^h - 2'$. Δ^* in $\tau 5^\circ - 15'$. latitudo $3^\circ - 54'$. fixa $4^\circ - 27'$. merid. horoscopus $\tau 25\frac{0}{3}$. Ergo luna limbis superior circa $6\frac{1}{2}$ p.m. transit paulo infra Antarem; si non ipsam abscondat.

Octobris.

7. $17^h - 53'$. Δ^* in $\Pi 3^\circ - 34'$. latitudo Sept. $3^\circ - 55'$; fixa $3^\circ - 57'$ horoscopus $\cong 15$: Luna propterea in eadem cum fixa longitudine circa Solis ortum limbis boreus ab ea distabit $17'$ circ.

Novembris.

3. $8^h - 57'$. luna in $\odot 25^\circ - 28'$. lat. Sept. $4^\circ 16'$. Pleiadum lucida tantum $4 - 00'$. horoscopus $\Omega 0\frac{1}{2}$. Ergo paulò ante octavam Δ subteget astralissimam Pleiadum limbo austriño, & semiborå post, infra lucidam ibit 5 min. Dignus Phænomenon, quippe luna in oppositu Solis versatur.

5. $8^h - 27$. Δ^* in $\Pi 20^\circ - 55'$. latitudo $2^\circ - 36'$; fixa $2^\circ - 28'$. Sept. horoscopus $\odot 26\frac{1}{2}$. Ergo circa $7\frac{1}{2}$ luna limbis superior ibit infra fixam saltem $20'$ min.

30. $17^h - 03'$. luna rursus cum lucida Pleiadum latitudinem habet borealem $4^\circ - 17'$. oriente in 14° : quamobrem limbis ejus superior mox ibit infra occidentalem lucidiorum 15 . & occasura distabit tantundem fere a lucida.

Decemb.

2. $16^h - 02'$. Δ^* in $\Pi 20^\circ - 55'$. latitudo $2^\circ - 55'$. bor; fixa $2^\circ - 28'$. horoscopus $m 5\frac{1}{2}$: Ergo luna limbis superior circa horam $17\frac{1}{2}$ ibit 15 min. fere infra stellam, in $\delta \odot$.

27. $4^h - 07'$. luna in $\odot 14^\circ - 00'$. latitudo borea $4^\circ - 52'$; fixa $4^\circ - 08'$. horoscopus $\odot 21$. Luna propterea stellam longitudine jam superavit, a qua tamen ejus distantiam, tubo capaciori, cummodo permittat calum, metiri licebit.

Reliquorum quinque Planetarum ad Fixas appulsus Anno 1674. ob
servabiles ab iisdem Ephemeridibus deducti à J. Flamstead.

th.	Loci planet.	Latitud.	Distantiae à fixis in longit.	Latitude
	s. o	o		
Januar.	76 mane ♂ in ♈ 17-28	o.-08 Aust.	2 in consequentia 28 mii cum	o.-28 Aust.
	86 mane ♂ ♈ 18-11	o.-08 Aust.	4 in antecedentia 29 mii cum	o.-37 Aust.
	126 manē ♀ ♈ 10-16	o.-09 Bor.	15 in antecedentia 8 ♈ cum	o.-50 Bor.
	266 manē ♀ ♈ 27-45	o.-28 Aust.	31 in antecedentia 8 ♈ —	o.-52 Aust.
	306 manē ♀ ≈ 2-45	o.-36 Aust.	24 in antecedentia 10 ♈ —	o.-51 Aust.
Febr.	46 manē ♀ ≈ 8-5	c.-47 Aust.	33 in antecedent. 19 ♈ —	o.-18 Aust.
	76 manē ♀ ≈ 12-38	o.-53 Aust.	32 in antecedent. 20 ♈ —	o.-23 Bor.
	156 vesp. ♂ ♈ 13-27	2-20 Aust.	cum 14 Xum & latitudine —	o.-49 Aust.
	226 manē ♀ ≈ 1-20	1-17 Aust.	24 in consequent. 15 ≈ —	o.-07 Aust.
	196 manē ♂ ≈ 9-02	1-08 Aust.	21 in ant. 19 ♈ —	o.-39 Aust.
Martii	256 manē ♂ ≈ 13-27	1-13 Aust.	17 in conf. 20 ♈ —	o.-04 Aust.
	68 vesp. ♀ ♈ 16-46	2-46 Bor.	28 in conf. 9 ♈ —	1.-00 Bor.
	78 vesp. ♀ ♈ 17-35	2-47 Bor.	8 in conf. 10 ♈ —	o.-03 Aust.
Aprilis	98 vesp. ♀ ♈ 18-51	2-47 Bor.	2 in ant. 11 ♈ —	o.-11 Bor.
	96 manē ♂ ≈ 24-32	1.-28 Aust.	16 in conf. 16 ≈ —	o.-32 Bor.
	185 manē ♂ ≈ 1-08	1.-35 Aust.	13 in conf. 15 ≈ —	o.-25 Aust.
	218 vesp. ♀ m 13-27	1.-18 Bor.	cum 5 ≈ & —	o.-04 Bor.
	304 manē ♂ ≈ 9-53	1.-46 Aust.	10 in ant. 24 ≈ —	o.-22 Aust.
	44 manē ♂ ≈ 12-51	1.-49 Aust.	10 in conf. 25 ≈ —	o.-49 Aust.
Maii	158 vesp. ♀ m 10-33	1-14 Bor.	cum 1 ≈ —	o.-48 Bor.
	238 vesp. ♀ m 9-45	1-13 Bor.	1 in ant. 2 ≈ —	o.-42 Aust.
Junii	59 vesp. ♀ ≈ 9-19	1-03 Bor.	21 in ant. 24 II —	o.-28 Aust.
	164 manē ♂ ♈ 13-29	2-17 Aust.	1 in conf. 14 Xum —	o.-46 Aust.
	189 vesp. ♀ ≈ 25-13	1-23 Bor.	14 in conf. 8 ♈ —	o.-07 Bor.
	244 manē ♂ ♈ 18-52	2-20 Aust.	7 in conf. 16 Xum —	o.-43 Bor.
	19 vesp. ♀ ≈ 2-32	1-29 Bor.	18 in ant. Praeceptis ♈ —	o.-15 Bor.
	294 manē ♂ ≈ 10-26	2-23 Aust.	cum 14 Ym —	o.-57 Aust.
	149 vesp. ♀ ≈ 23-14	1-33 Bor.	10 in ant. 16 Ym —	o.-37 Aust.
	139 vesp. ♀ ≈ 25-40	1-32 Bor.	20 in consequentia Cord. S. —	1.-05 Bor.
Julii	259 vesp. ♀ ≈ 10-14	1-20 Bor.	13 in conf. 38 Ω —	o.-00
	268 vesp. ♀ m 9-42	0.-57 Bor.	2 in ant. 2 ≈ & —	o.-58 Aust.
	289 vesp. ♀ ≈ 13-32	1-17 Bor.	19 in conf. 24 Ω —	o.-23 Aust.
	48 vesp. ♀ m 10-37	0.-55 Bor.	4 in conf. 1 ≈ & lat. —	o.-29B.ver.
	48 vesp. ♀ ≈ 22-16	1-04 Bor.	19 in ant. 5 Ω —	o.-21 Bor.
Augusti	118 vesp. ♀ ≈ 00-43	0.-47 Bor.	24 in conf. 6 Ω —	o.-38 Aust.
	258 vesp. ♀ m 13-25	0.-50 Bor.	3 in ant. 5 ≈ —	o.-24 Bor.
	287 vesp. ♀ ≈ 21-03	0.-02 Aust.	16 in conf. 18 Ω —	o.-17 Bor.
	155 manē ♂ ≈ 14-28	1-02 Bor.	16 in conf. 24 Ω —	o.-38 Aust.
Sept.	185 vesp. ♀ m 15-56	1-15 Aust.	24 in ant. 18 ≈ —	o.-33 Bor.
	266 vesp. ♀ ≈ 00-00	1-54 Bor.	9 in ant. 6 Ω —	o.-29 Bor.
	236 vesp. ♀ m 27-49	1-50 Aust.	22 in ant. 2 m —	o.-04 Bor.
Octob.	156 vesp. ♀ m 23-03	0.-42 Bor.	7 in ant. 11 ≈ —	o.-40 Bor.
	315 vesp. ♀ ≈ 5-09	3-01 Aust.	14 in ant. 6 T —	o.-49 Bor.
	25 vesp. ♀ ≈ 7-21	3-02 Aust.	33 in ant. 5 Y —	o.-29 Bor.
Novem.	115 vesp. ♀ ≈ 16-59	3-00 Aust.	30 in ant. 16 T —	o.-c8 Bor.
	176 vesp. ♂ o 16-21	1-01 Bor.	3 in conf. 9 Y —	o.-45 Aust.
	93 vesp. ♀ ≈ 13-23	1-16 Aust.	18 in conf. 20 Y —	o.-00
Decem.	26 vesp. ♀ ≈ 20-58	0.-15 Bor.	21 in ant. 37 Y —	o.-26 Bor.
	276 vesp. ♂ ≈ 16-24	1-51 Aust.	2 in ant. 26 Y —	o.-30 Bor.
			4 in conf. 9 Y cum lat. —	o.-58 ver.

De Lunæ Eclipsibus tacui ferè, quippe quas amicus quidam in Ephemeride sua accuratius à Theoria Horrocciana supputavit. Saturni & Jovis ad fixas appulsus per noctes aliquot cum præcedentes, tum diem, in tabula conjunctioni conscriptam sequentes observare licet: Jovisque citius quippe ejus in Ephemeride Heckeriana motus 13' min. justo tardiores hoc anno reperiuntur. Commodum foret, etiam ad transitus 3ⁱⁱ, 2ⁱⁱ, & 4ⁱⁱ per fixam nocte tum præcedente tum sequente eam in tabula exarata attendere, ne ipso tempore minus sit serenum Cælum; quod Cælispicibus serenus quam per elapsum annum expertus est, hisce Phainomenis obseruandis exceptat. Derbiæ Dec. 3. 1673. J. F.

An Account of some Books.

- I. *PHARMACEUTICE RATIONALIS, sive Diatriba de Medicamentorum Operationibus in Humano corpore: Auth. Tho. Willis M.D. in Univ. Oxon. Prof. Sedlejano, nec non Coll. Med. Lond & Societ. Reg. Socio. E Theat. Sheldon. 1673. in 4°.*

THE Design and Busines of this Instructive and Useful piece is, To give the Mechanical reason of the operation of all sorts of Medicines upon the Animal spirits in Mans body, and after what manner and how many ways they ferment the Blood and Humors in the same. For the clearer understanding of which, the Excellent Author premiseth an exact Description and Representation of the Stomach and Bowels, in which those Animal Spirits do lodge, and are first of all by the particles of the medicine wrought upon. In the doing of which, he hath in a very accurate manner examined those parts, from the very Mouth to the end of the Bowels; and in each of them very elaborately laid open their Nervous, Muscular and Glandulous membrans, and shew'd the several positions of fibres in them, lying long-ways, transverse and oblique, some meerly serving for sense, others for variety of motion; together with the curious woof of the Arteries and Veins, and the rare contrivance of numerous Glanduls.

This being dispatch't, he makes it his busines to explain the principal thing proposed, which, he saith, hath been hitherto one of the *Desiderata in Physick, viz.* In what manner, and by what kinds of impression upon the parts of an Human Body, Medicaments perform their operations, that is to say, How and Why some Medicins are Vomitive, some Purgative, others Sudorifique,