

with a little pressing, I took a drop thereof, and in it discover'd a mighty number of living Creatures. I repeated my observation the same evening with the same success, but the next day I could find none of them alive; and whereas I had laid that drop upon a small Copper Plate, I fancied to my self that the exhalation of the moisture might be the cause of their death, and not the cold weather, which at that time was very moderate.

In the beginning of *April* I took the Male seed of a Jack or Pike, but could discover nothing more than in that of a Cod-fish, but having added about four times as much Water in quantity as the matter itself was, and then making my remarks, I could perceive that the *Animalcula* did not only wax stronger and swifter, but, to my great amazement, I saw them move with that celerity, that I could compare it to nothing more than what we have seen with our naked Eye, a River Fish chased by its powerful Enemy, which is just ready to devour it: You must observe that this whole Course was not longer than the Diameter of a single Hair of ones Head.

VII. *Scala graduum Caloris.*

Calorum Descriptiones & signa.

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| 0 | Calor aeris hyberni ubi aqua incipit gelu rigescere. Innotescit hic calor accurate locando Thermometrum in nive compressta quo tempore gelu solvitur. |
| 0,1,2. | Calores aeris hyberni. |
| 2,3,4. | Calores aeris verni & autumnalis. |
| 4,5,6. | Calores aeris aestivi. |
| 6 | Calor aeris meridiani circa mensem Iulium. |
| 12 | Calor maximus quem Thermometer ad contactum |

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| | | | tactum corporis humani concipit. Idem circiter est calor avis ova incubantis. |
| 14 $\frac{3}{7}$ | 1 $\frac{1}{4}$ | Calor balnei prope maximus quem quis manu immersa & constanter agitata diutius perfere potest. Idem fere est calor sanguinis recens effusi. | |
| 17 | 1 | Calor balnei maximus quem quis manu immersa & immobili manente diutius perfere potest. | |
| 20 $\frac{2}{7}$ | 1 $\frac{3}{4}$ | Calor balnei quo cera innatans & liquefacta deferendo regiscit & diaphaneitatem amittit. | |
| 24 | 2 | Calor balnei quo cera innatans incalscendo, liqueficit & in continuo fluxu sine ebullitione conservatur. | |
| 28 $\frac{6}{7}$ | 2 $\frac{1}{4}$ | Calor mediocris inter calores quo cera liqueficit & aqua ebullit. | |
| 34 | 2 $\frac{1}{2}$ | Calor quo aqua vehementer ebullit & mistura duarum partium plumbi trium partium stanni & quinque partium bismuti defervendo rigescit. Incipit aqua ebullire calore partium 33 & calorem partium plusquam 34 $\frac{1}{2}$ ebulliendo vix concipit. Ferrum vero defervescent calore partium 35 vel 36, ubi aqua calida & 37 ubi frigida in ipsum guttatum incidit, definit ebullitionem excitare. | |
| 40 $\frac{4}{7}$ | 2 $\frac{3}{4}$ | Calor minimus quo mistura unius partis Plumbi quatuor partium Stanni & quinque partium Bismuti incalscendo liqueficit, & in continuo fluxu conservatur. | |
| 48 | 3 | Calor minimus quo mistura æqualium partium stanni & bismuti liqueficit. Hæc mistura calore partium 47 defervendo coagulatur. | |
| 57 | 3 $\frac{1}{4}$ | Calor quo mistura duarum partium stanni & unius partis bismuti funditur, ut & mistura trium partium stanni & duarum plumbi sed mistura quinq; partium stanni & duarum | |

N n n n n 2

partium

- partium bismuti hoc calore defervendo rigescit. Et idem facit mistura æqualium partium plumbi & bismuti.
- 68 3 $\frac{1}{2}$ Calor minimus quo mistura unius partis bismuti & octo partium stanni funditur. Stannum per se funditur calore partium 72 & Defervendo rigescit calore partium 70.
- 81 3 $\frac{3}{4}$ Calor quo bismutum funditur ut & mistura quatuor partium plumbi & unius partis stanni. Sed mistura quinque partium plumbi & unius partis stanni ubi fusâ est & defervet in hoc calore rigescit.
- 96 4 Calor minimus quo piumbum funditur. Plumbum incalescendo funditur calore partium 96 vel 97 & defervendo rigescit calore partium 95.
- 114 4 $\frac{1}{4}$ Calor quo corpora ignita defervendo penitus desciunt in tenebris nocturnis lucere, & vicissim incalescendo incipiunt in iisdem tenebris lucere sed luce tenuissima quæ sentiri vix possit. Hoc calore liqueficit mistura æqualium partium Stanni & Reguli martis, & mistura septem partium bismuti & quatuor partium ejusdem Reguli defervendo rigescit.
- 136 4 $\frac{1}{2}$ Calor quo corpora ignita in tenebris nocturnis carent, in crepusculo vero neutiquam. Hoc calore tum mistura duarum partium reguli martis & unius partis Bismuti tum etiam mistura quinq; partium reguli martis & unius partis Stanni defervendo rigescit. Regulus per se rigescit calore partium 146.
- 161 4 $\frac{3}{4}$ Calor quo corpora ignita in crepusculo proxime ante ortum solis vel post occasum ejus manifesto carent in clara vero die luce neutiquam, aut non nisi perobscure.

192. 5 Calor prunaram in igne parvo culinari ex carbonibus fossilibus bituminosis constructo & absq; usu follium ardeat. Idem est calor ferri in tali igne quantum potest candens. Ignis parvi culinaris qui ex lignis constat calor paulo major est nempe partium 200 vel 210. Et ignis magni major adhuc est calor, praesertim si follibus creatur.

In hujus Tabulae columna prima habentur gradus caloris in proportione arithmeticā computum inchoando a calore quo aqua incipit gelu rigescere tanquam ab infimo caloris gradu seu commune termino caloris & frigoris, & ponendo calorem externum corporis humani esse partium duodecim. In secunda columnā habentur gradus caloris in ratione geometricā sic ut secundus gradus sit duplo major primo, tertius item secundo & quartus tertio, & primus sit calor externus corporis humani sensibus aequatus. Patet autem per hanc Tabulam quod calor aquæ bullientis sit fere triplo major quam calor corporis humani, & quod calor stanni liquefcientis sit sextuplo major & calor plumbi liquefcientis octuplo major & calor Reguli liquefcientis duodecuplo major & calor ordinarius ignis culinaris sexdecim vel septendecim vicibus major quam calor idem corporis humani.

Constructa fuit hæc Tabula ope Thermometri & ferrī candentis. Per Thermometrum inveni mensuram calorū omnium usq; ad calorem quo stannum funditur & per ferrum calefactum inveni mensuram reli quorum. Nam calor quem ferrum calefactum corporibus frigidis sibi contiguis dato tempore communicat, hoc est calor quem ferrum dato tempore amittit est ut calor totus ferri. Ideoq; si tempora refrigerii sumantur æqualia calores erunt in ratione geometrica, & propterea per tabulam logarithmorum facile inveniri possunt.

Primum igitur per Thermometrum ex oleo lini constructum inveni quod si oleum ubi Thermometer in nive liquefcente locabatur occupabat spatium partim 10000, idem

idem oleum calore primi gradus seu corporis humani rarefactum occupabat spatium 10256 & calore aquæ jamjam ebullire incipientis spatium 10705 & calore aquæ vehementer ebullientis spatium 10725 & calore stanni liquefacti de fervientis ubi incipit rigescere & consistentiam amalgamentis induere spatium 11516 & ubi omnino rigescit spatium 11496. Igitur oleum rarefactum fuit ac dilatatum in ratione 40 ad 39 per calorem corporis humani, in ratione 15 ad 14 per calorem aquæ bullientis, in ratione 15 ad 13 per calorem stanni defervientis ubi incipit coagulari & rigescere & in ratione 23 ad 20 per calorem quo stannum deferviens omnio rigescit. Rarefactio aeris æquali calore fuit decuplo major quam rarefactio olei, & rarefactio olei quasi quindecim vicibus major quam rarefactio spiritus vini. Et ex his inventis ponendo calores olei ipsius rarefactioni proportionales & pro calore corporis humani scribendo partes 12 prodijt calor aquæ ubi incipit ebullire partum 33 & ubi vehementius ebullit partum 34; & calor stanni ubi vel liquefit vel deferviendo incipit rigescere & consistentiam amalgamatis induere prodijt partum 72, & ubi defervendo rigescit & induratur partum 70.

His cognitis ut reliqua investigarem calefeci ferrum satis crassum donec satis candenter & ex igne cum forcipe etiam candente exemptum locavi statim in loco frigido ubi ventus constanter spirabat & huic imponendo particulas diversorum metallorum & aliorum corporum liquabilium notavi tempora refrigerij donec particulae omnes amissa fluiditate rigescerent & calor ferri æquaretur calori corporis humani. Deinde ponendo quod excessus calorum ferri & particularum rigescientium supra calorem atmosphæræ Thermometro inventum essent in progressione geometrica ubi tempora sunt in progressione Arithmetica, calores omnes innotuerent. Locavi autem ferrum, non in aere tranquillo sed in vento uniformiter spirante ut aer a ferro calefactus semper abriperetur a vento & aer frigidus in locum ejus uniformi cum motu succederet. Sic enim aeris partes æquales æqualibus temporibus calefactæ sunt & calorem conceperunt calori ferri proportionalem.

Calores autem sic inventi eandem habuerunt rationem inter se cum caloribus per Thermometrum inventis & prop- terea rarefactiones olei ipsius caloribus proportionales esse recte assumpsimus.

VIII. An Account of Books.

Profluvia Ventris : or the Nature and Causes of Loosenesse plainly discovered, their Symptome and sorts evidently settled, the Maxims for Curing 'em fully demonstrated, and all illustrated with the most remarkable Methods and Medicins of all Ages ; and with some Practical Observations concluding every sort. By William Cockburn, M. D. late Physician of his Majesties Fleet, F. R. S. and of the Colledge of Physicians, London, 1701. in 8°

In this Book, the Author enquires into the Nature and Cure of those Distempers ; and that he may the better avoid the perplexing number of sorts that are commonly found in Books of Physick, he has suppos'd himself absolutely ignorant of what has been said formerly, and endeavours to discover the most general mark of Loosenesse ; and proceed, by that, to find as many more as may be useful to distinguish them in proper sorts, and that by marks taken from observation and the Stools themselves. Those sorts he gives proper names to, and those especially they have obtain'd among ancient Authors.

In this method, he discovers only the *Diarrhaea*, *Lienteria*, *Passio Celiaca* and the *Dysenteria*. Having settled these after this manner, he proceeds to discover by his own