(824)

with a little preffing, I took a drop thereof, and in it difcover'd a mighty number of living Creatures. I repeated my obfervation the fame evening with the fame fuccefs, but the next day I could find none of them alive; and whereas I had laid that drop upon a fmall Copper Plate, I fancied to my felf that the exhalation of the moifture might be the caufe of their death, and not the cold weather, which at that time was very moderate.

In the beginning of *April* I took the Male feed of a Jack or Pike, but could difcover nothing more than in that of a Cod-fifh, but having added about four times as much Water in quantity as the matter itfelf was, and then making my remarks, I could perceive that the *Animalcula* did not only wax ftronger and fwifter, but, to my great amazement, I faw them move with that celerity, that I could compare it to nothing more than what we have feen with our naked Eye, a River Fifh chafed by its powerful Enemy, which is juft ready to devour it: You muft obferve that this whole Courfe was not longer than the Diameter of a fingle Hair of ones Head.

VII. *Scala graduum Caloris.*

Calorum Defcriptiones & figna.

☉	CAlor aeris hyberni ubi aqua incipit gelu rigefcere. Innotefcit hic calor accurate locando Thermometrum in nive comprefla quo tempore gelu folvitur.
0,1,2.	Calores aeris hyberni.
2,3,4.	Calores aeris verni & autumnalis.
4,5,6.	Calores aeris æftivi.
6	Calor aeris meridiani circa menfem Julium.
12 1	Calor maximus quem Thermometer ad contactum

(825)

taĉtum corporis humani concipit. Idem circiter eft calor avis ova incubantis.

$14\frac{3}{17}$	$1\frac{1}{4}$	Calor balnei prope maximus quem quis manu immerfa & conftanter agitata diutius per-ferre poteft. Idem fere eft calor fanguinis recens effufi.
17	$1\ 1$	Calor balnei maximus quem quis manu immerfa & immobili manente diutius perferre poteft.
$20\frac{2}{11}$	$1\frac{3}{4}$	Calor balnei quo cera innatans & liquefaĉta deferendo regifcit & diaphaneitatem amittit.
24	2	Calor balnei quo cera innatans incalefcendo, liquefcit & in continuo fluxu fine ebulliti-one confervatur.
$28\frac{6}{11}$	$2\frac{1}{4}$	Calor mediocris inter calores quo cera liquefcit & aqua ebullit.
34	$2\frac{1}{2}$	Calor quo aqua vehementer ebullit & miftura duarum partium plumbi trium partium ftanni & quinque partium bifmuti defervendo rigef-cit. Incipit aqua ebullire calore partium 33 & calorem partium plufquam $34\frac{1}{2}$ ebulliendo vix concipit. Ferrum verò defervefcens calore partium 35 vel 36, ubi aqua calida & 37 ubi frigida in ipfum guttatim incidit, definit ebullitionem excitare.
$40\frac{4}{11}$	$2\frac{3}{4}$	Calor minimus quo miftura unius partisPlumbi quatuor partium Stanni & quinque partium Bifmuti incalefcendo liquefcit, & in conti-nuo fluxu confervatur.
48	3	Calor minimus quo miftura æqualium partium ftanni & bifmuti liquefcit. Hæc miftura calore partium 47 defervendo coagulatur.
57	$3\frac{1}{4}$	Calor quo miftura duarum partium ftanni & unius partis bifmuti funditur, ut & miftura trium partium ftanni & duarum plumbi fed miftura quinq; partium ftanni & duarum

N n n n 2   partium

(826)

partium bifmuti hoc calore defervendo ri-
gefcit. Et idem facit miftura æqualium
partium plumbi & bifmuti.

68	$3\frac{1}{2}$	Calor minimus quo miftura unius partis bif-muti & octo partium ftanni funditur. Stan-num per fe funditur calore partium 72 & Defervendo rigefcit calore partium 70.
81	$3\frac{3}{4}$	Calor quo bifmutum funditur ut & miftura quatuor partium plumbi & unius partis ftanni. Sed miftura quinque partium plum-bi & unius partis ftanni ubi fufa eft & de-fervet in hoc calore rigefcit.
96	4	Calor minimus quo plumbum funditur. Plum-bum incalefcendo funditur calore partium 96 vel 97 & defervendo rigefcit calore par-tium 95.
114	$4\frac{1}{4}$	Calor quo corpora ignita defervendo penitus defiaunt in tenebris nocturnis lucere, & vi-ciffim incalefcendo incipiunt in iifdem tene-bris lucere fed luce tenuiffima quæ fentiri vix poffit. Hoc calore liquefcit miftura æqualium partium Stanni & Reguli martis, & miftura feptem partium bifmuti & qua-tuor partium ejufdem Reguli defervendo rigefcit.
136	$4\frac{1}{2}$	Calor quo corpora ignita in tenebris nocturnis candent, in crepufculo vero neutiquam. Hoc calore tum miftura duarum partium re-guli martis & unius partis Bifmuti tum etiam miftura quinq; partium reguli martis & unius partis Stanni defervendo rigefcit. Regu-lus per fe rigefcit calore partium 146.
161	$4\frac{3}{4}$	Calor quo corpora ignita in crepufculo pro-xime ante ortum folis vel poft occafum ejus manifefto candent in clara vero diei luce neutiquam, aut non nifi perobfcure.

Calor

(827)

192. 5 Calor prunarum in igne parvo culinari ex car-
bonibus foffilibus bituminofis conftructo &
abfq; ufu follium ardente. Idem eft calor
ferri in tali igne quantum poteft candentis.
Ignis parvi culinaris qui ex lignis conftat
calor paulo major eft nempe partium 200
vel 210. Et ignis magni major adhuc eft
calor, præfertim fi follibus cieatur.

In hujus Tabulæ columna prima habentur gradus caloris
in proportion e arithmetica computum inchoando a calore
quo aqua incipit gelu rigefcere tanquam ab infimo caloris
gradu feu commune termino caloris & frigoris, & ponendo
calorem externum corporis humani effe partium duodecim.
In fecunda columna habentur gradus caloris in ratione geo-
metrica fic ut fecundus gradus fit duplo major primo, tertius
item fecundo & quartus tertio, & primus fit calor exter-
nus corporis humani fenfibus æquatus. Patet autem per
hanc Tabulam quod calor aquæ bullientis fit fere triplo ma-
jor quam calor corporis humani, & quod calor ftanni li-
quefcentis fit fextuplo major & calor plumbi liquefcentis
octuplo major & calor Reguli liquefcentis duodecuplo ma-
jor & calor ordinarius ignis culinaris fexdecim vel feptem-
decim vicibus major quam calor idem corporis humani.

Conftructa fuit hæc Tabula ope Thermometri & ferri
candentis. Per Thermometrum inveni menfuram calorum
omnium ufq; ad calorem quo ftannum funditur & per fer-
rum calefactum inveni menfuram reli quorum. Nam calor
quem ferrum calefactum corporibus frigidis fibi contiguis
dato tempore communicat, hoc eft calor quem ferrum dato
tempore amittit eft ut calor totus ferri. Ideoq; fi tempora
refrigerii fumantur æqualia calores erunt in ratione geome-
trica, & propterea per tabulam logarithmorum facile in-
veniri poffunt.

Primum igitur per Thermometrum ex oleo lini con-
ftructum inveni quod fi oleum ubi Thermometer in nive
liquefcente locabatur occupabat fpatium partim 10000,

idem

(828)

idem oleum calore primi gradus feu corporis humani rare-
factum occupabat fpatium 10256 & calore aquæ jamjam
ebullire incipientis fpatium 10705 & calore aquæ vehe-
menter ebullientis fpatium 10725 & calore ftanni lique-
facti de fervientis ubi incipit rigefcere & confiftentiam
amalgamentis induere fpatium 11516 & ubi omnino ri-
gefcit fpatium 11496. Igitur oleum rarefactum fuit ac
dilatatum in ratione 40 ad 39 per calorem corporis huma-
ni, in ratione 15 ad 14 per calorem aquæ bullientis, in
ratione 15 ad 13 per calorem ftanni defervientis ubi inci-
pit coagulari & rigefcere & in ratione 23 ad 20 per calorem
quo ftannum deferviens omnio rigefcit. Rarefactio aeris
æquali calore fuit decuplo major quam rarefactio olei, &
rarefactio olei quafi quindecim vicibus major quam rare-
factio fpiritus vini. Et ex his inventis ponendo calores
olei ipfius rarefactioni proportionales & pro calore corporis
humani fcribendo partes-12 prodijt calor aquæ ubi incipit
ebullire partium 33 & ubi vehementius ebullit partium 34 ;
& calor ftanni ubi vel liquefcit vel deferviendo incipit ri-
gefcere & confiftentiam amalgamatis induere prodijt parti-
um 72, & ubi defervendo rigefcit & induratur partium 70.

His cognitis ut reliqua inveftigarem calefeci ferrum fatis
craffum donec fatis canderet & ex igne cum forcipe etiam
candente exemptum locavi ftatim in loco frigido ubi ventus
conftanter fpirabat & huic imponendo particulas diverfo-
rum metallorum & aliorum corporum liquabilium notavi
tempora refrigerij donec particulæ omnes amiffa fluiditate
rigefcerent & calor ferri æquaretur calori corporis humani.
Deinde ponendo quod exceffus calorum ferri & particula-
rum rigefcentium fupra calorem atmofphæræ Thermome-
tro inventum effent in progreffione geometrica ubi
tempora funt in progreffione Arithmetica, calores om-
nes innotuere. Locavi autem ferrum, non in aere tran-
quillo fed in vento uniformiter fpirante ut aer a ferro cale-
factus femper abriperetur a vento & aer frigidus in locum
ejus uniformi cum motu fuccederet. Sic enim aeris partes
æquales æqualibus temporibus calefactæ funt & calorem con-
ceperunt calori ferri proportionalem.   Ca-

(829)

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

VIII. *An Account of Books.*

Profluvia Ventris : *or the Nature and Cauſes of Looſeneſſes plainly diſcovered, their Symptoms 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 Looſeneſſes ; 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 *Diarrhæa, Lienteria, Paſſio Cæliaca* and the *Dyſenteria.* Having ſettled theſe after this manner, he proceeds to diſcover by his own

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