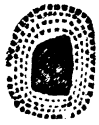
An Intimation of divers Philoſophical particulars, now undertaken and conſider'd by ſeveral Ingenious and Learned men; here inſerted to excite others to joyn with them in the ſame or the like Attempts and Obſervations.

Firſt, we have notice given us, that at *Paris* the Excellent Signior *Caſſini* hath lately detected again *Spots* in the Sun, of which none have been ſeen theſe many years, that we know of. 'Tis hoped that that learned Aſtronomer will ſhortly publiſh a Deſcription of what he ſhall have obſerved of this kind. Mean time we cannot but acquaint the Curious, that, as far as we can learn, the laſt obſervation in *England* of any *Solar Spots*, was made by our Noble Philoſopher Mr. *Boyl*, vvho, upon an occaſional diſcourſe of this Subject, vvas pleaſed to communicate vvhat he had obſerved of this kind, as he found it regiſtred in his *Notes*, viz.

Friday, April 27. 1660. *about* 8 *of the clock in the Morning, there appear'd a Spot in the lower limb of the Sun a little towards the South of its* Æquator, *which was entred about* $\frac{1}{40}$ *of the Diameter of the Sun, it ſelf being about* $\frac{1}{16}$ *in its ſhorteſt Diameter, of that of the Sun; its longeſt, about* $\frac{1}{40}$ *of the ſame. It diſappear'd upon Wedneſday Morning (May* 9th*) though we ſaw it the day before about* 10 *in the morning to be near about the ſame diſtance from the Weſt-ward limb a little South of its* æquator, *that it firſt appear'd to be from the Eaſt-ward-limb, a little South alſo of its* æquator, *It ſeem'd to move faſter in the middle of the Sun than towards the limb. It was a very dark Spot almoſt of a quadrangular form, and was encloſed round with a kind of duskiſh cloud, much in this form and in this proportion to the Spot.*



We

We firſt obſerv'd this very ſame Spot both for figure, colour and bulk, to be re-enter'd the Sun May 25th, *when it ſeem'd to be in a part of the ſame line it had formerly traced; and was enter'd about* $\frac{4}{33}$ *of its Diameter about* 7 *of the clock in the afternoon. At the ſame time there appear'd another Spot, which was juſt entred and appear'd to be entred not above* $\frac{1}{132}$ *part of the Sun's diameter. It appear'd to be longeſt towards the North and South, and ſhorteſt towards the Eaſt and Weſt. There ſeem'd to be diſpers'd about it divers ſmall clouds here and there.*

Theſe Obſervations vvere made, as the Noble Obſerver told us, vvith an excellent Teleſcope, in the preſence of divers Curious and Ingenious perſons, one of vvhom was Mr. *Hook*. And diſcourſing of the thoughts he had entertain'd touching the Effects of ſuch Spots, he ſuggeſted this Inquiry, Whether they might not cauſe a conſiderable alteration both in the Body of the Sun it ſelf, and in our Air and the Bodies in it upon their diſſipation?

Secondly, vve underſtand, that at *Paris* the *Royal Obſervatory*, now a building for making Celeſtial Diſcoveries, is very far advanced, and will ſhortly be in a condition to be employed for the uſe intended; whence vve may expect a conſiderable advancement of the Aſtronomical Science. In the ſame Edifice, vvhich the ſaid *Obſervatory* maketh a part of, we are inform'd that there is, beſides many other rooms fit for Philoſophical uſes and purpoſes, a very deep Cave, having an hundred threeſcore and ten ſteps of deſcent; wherein many ſorts of Experiments are intended to be made, being of that nature, that they require to be remote from the Sun-beams and the open Air; ſuch as are Thermometrical ones, and ſuch as concern Refrigerations, Coagulations, Indurations, and Conſervations of Bodies, and a thouſand things more.

Thirdly, vve hear, that the Learned Monſieur *Mariotte* is publiſhing two very deſirable Diſcourſes, the one of *Viſion*; upon vvhich ſubject he hath diſcovered ſomething new and conſiderable: the *other* of the Art of *Levelling*, vvherein he delivers many remarkable particulars about Refraction, and the Errors, that may, upon the account thereof,

be impoſed upon men; together with ſeveral New Inſtruments of Levelling exactly.

Fourthly, vve find by Letters out of *Germany*, that the learn'd Phyſitian Dr. *Kornmannus*, is printing a Book concerning the Tinctures or Eſſences of the Excretions of Inſects, which having fed upon ſeveral herbs and flowers, yield ſuch dungs, vvherein the tincture, colour and vertue of theſe vegetables are to be found: Thus for example, he can extract a curiouſly red tincture out of Excrements of Worms that have fed upon Roſes, *&c.*

Fifthly, vve find by Letters out of *Italy*, that a very Ingenious perſon there, upon the conſideration of what hath been lately intimated touching certain Experiments for finding out, whether there be a Circulation of Sap in Trees, reſembling that of Bloud in Animals; Offers it to the conſideration of Naturaliſts, Whether it be likely to find a place in Vegetables, whence the Sap may part, and whither it may return, ſuch as is the Heart in Animals; adding, that whereas Vegetables are alwayes to put forth new branches, leaves, *&c.* it ſeems to be ſufficient for them, that there be a continual and plentiful courſe and ſupply of Juyce, to thruſt out every way, without any neceſſity of ſuch a Circulation.

Sixthly, whereas it hath been more than once mention'd in theſe Papers; * *Mulierum teſtes eſſe Ovario analogos; nec tantùm in nuptis & fœcundis Mulieribus, ſed etiam in Virginibus eſſe Ova vera*, &c. We cannot but ſignifie here, for further inquiry, that there hath been very lately made by two Phyſitians at *Paris* a diſſection of a Cow, *in cujus teſticulis ova reperta fuerint, uti Kerkringius obſervaſſe ſe ſcripſerat in Antbropogeniæ ſuæ Iebnographia*; and that *there* they intend to purſue this Inquiry, inviting others to make the ſame reſearch. Wherein ſince the learned Dr. *Walter Needham*, an Engliſh Phyſitian, and a worthy Fellow of the *R. Society*, hath heretofore already been converſant to good purpoſe, it is here publikely wiſhed, that he would make a further progreſs in the ſame; *plures inſtitu-*

* See *Numb.* 32. p 628, and *Numb.* 70. p. 2136.

inſtituendo diſſectiones, catellarum imprimis valdè juvenum, &c. ad rei certitudinem majorem.

Seaventhly, from *Germany* we are inform'd, that in the Univerſity of *Jena* in *Upper Saxony*, one Mr. *Weighelius*, Profeſſor of the Mathematicks there, hath invented ſeveral ingenious Inſtruments and Engins; As firſt, an Aſtronomical one, which he calls *Aſtrodictticum*, by the means whereof very many perſons ſhall be able at one and the ſame time to behold one and the ſame Star. Secondly, An exceeding great *Globe* of the *World*, capable of ten perſons to ſit in it all at once, and to behold the motions of the celeſtial Bodies, *&c.* Thirdly, An *odd Bridge*, or a kind of Stairs, by which a man ſhall deſcend and yet really be raiſed upward, and going as 'twere upon a plain ſhall, from a lower, by gently ſubſiding, arrive to an upper ſtory, *&c.* Of theſe and other particulars, ſaid to be in part already done, and in part deſign'd by the ſaid Mathematician, we hope we ſhall in time obtain a more ſatisfactory accompt.

The Extract of a Letter written by Mr. John Ray *to the Publiſher from* Midleton, *July* 3. 1671. *concerning Spontaneous Generation; As alſo ſome Inſects ſmelling of Muſk.*

Sir,

AS to the particulars contain'd in your Letter, I well remember, that Mr. *Liſter* did, a good while ſince, write me his opinion concerning *Vegetable Excreſcencies*, and the Inſects therein bred and harboured; but the Letter containing that Diſcourſe I have not at preſent by me, it being ſent away in a bund'le of other Letters and papers into *Eſſex*. I have therefore written to him to deſire him, to take the pains himſelf to ſend you his thoughts upon that ſubject. *

* *The Reader is like to find this Accompt in the Tranſactions of the next Month.*

Whether there be any *Spontaneous* or Anomalous *Generation* of Animals, as hath been the conſtant opinion of Naturaliſts heretofore, I think there is good reaſon to queſtion. It ſeems to me at preſent moſt probable, that there