

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, vvvas 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 $\frac{1}{4}$. of the Diameter of the Sun, it self being about $\frac{1}{12}$. in its shortest Diameter, of that of the Sun ; its longest, about $\frac{1}{4}$. 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 duskyish cloud, much in this form and in this proportion to the Spot.



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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 were made, as the Noble Observer told us, with an excellent Telescope, in the presence of divers Curious and Ingenious persons, one of whom 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, we 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 we may expect a considerable advancement of the Astronomical Science. In the same Edifice, which 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, we hear, that the Learned Monsieur Mariotte is publishing two very desirable Discourses, the one of Vision; upon which 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 tantum in nuptis & facundis Mulieribus, sed etiam in Virginibus esse Ova vera, &c.* We cannot but signify here, for further inquiry, that there hath been very lately made by two Physitians at *Paris* a dissection of a Cow, *in cuius testiculis ova reperta fuerint, uti Kerkringius observasse se scripserat in Anthropogenia sua Ichnographia* ; 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 publicly wished, that he would make a further progress in the same ; *plures instituta*

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

instituyendo dissectiones, catellarum imprimis valde juvenum, &c. ad rei certitudinem majorem.

Seaventhly, from *Germany* we are inform'd, that in the Univerfity of *Jena* in *Upper Saxony*, one Mr. *Weighelins*, Profeflor of the *Mathematicks* there, hath invented feveral ingenious *Instruments* and *Engins*; As firft, an *Aftro-nomical* one, which he calls *Aftrodicticum*, by the means whereof very many perfons fhall be able at one and the fame time to behold one and the fame *Star*. Secondly, An exceeding great *Globe* of the *World*, capable of ten perfons to fit 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 fhall defcend and yet really be raifed upward, and going as 'twere upon a plain fhall, from a lower, by gently fubfiding, arrive to an upper ftory, &c. Of thefe and other particulars, faid to be in part already done, and in part defign'd by the faid *Mathematician*, we hope we fhall in time obtain a more fatisfactory account.

The Extract of a Letter written by Mr. John Ray to the Publiſher from Middleton, July 3. 1671. concerning Spontaneous Generation; As alfo ſome Inſects (melling 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 band'e of other Letters and papers into *Eſſex*. I have therefore writ-ten 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 Account 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