

Distance of *Saturn*, and even farther; and consequently that no living Creature could subsist there. Nay there must have been a Time, when the Planets were nearer to some fixt Stars than to the Sun; and in this Case they could never come into the Solar System. This then is a Proof, purely physical, that the World, in its present State, must have had a Beginning, and must have an End. In order to improve this Notion, and to find with Exactitude, how much the Years become shorter in each Century; I am in Hopes that a great Number of older Observations will afford me the necessary Succours.

I beg you will present my Respects to the Royal Society; and am,

Yours, &c.

L. Euler.

IV. *Part of a Letter from Mr. Benj Cooke, F. R. S. to Mr. Peter Collinson, F. R. S. concerning the Effects of the Mixture of the Farina of Apple-Trees; and of the Mayze or Indian Corn: And of a Child born with the Jaundice upon it, received from its Father; and of the Mother taking the same Distemper from her Husband, the next Time of being with Child.*

Read Nov. 2. 1749. **W**HEN the Farina of one Apple impregnates another's Blossom of differing Species, we see the Change in * the Fruit; but whether any lasting Impression is left on the Bough

* See these Transactions No. 490. p. 622.

Bough which bore it (as seems to be in Tulips and some other Flowers), is not so easy to determine, Experiments of this sort being not to be made at all, but catch'd at distant Opportunities; and till this Point is settled, the Distemper of my good Friend's Tree must rest unexplained.

Artificial Helps of Sight have added to former Discoveries the explosive Manner of the *Farina's* Action; but what may be the Effect of the inconceivably fine subtile Matter emitted from its Globules, and continually waisted about in great Plenty and Variety in the Summer Air, not only on vegetable Productions (where on different Subjects it may not improbably have opposite Effects) but other Matters not yet suspected to be so much under its Influence, remains a Field of Inquiry for future Ages.—However, to what Mr. *Lozgan* hath very justly observed (*Transact.* 440.) on the Manner of Impregnation of the Seeds in Mayze—I can add this, that if the Seed and whole Species of Mayze be planted about two Yards Distance from each other, there will be a Mixture of red and white Grains in the Ears of each Plant, and you may with Pleasure observe the Filament in the white Plant, which hath been struck with the red Farina, discovering its alien Commerce by a conscious Blush, and by counting the Threads they stained, foretell how many corresponding Seeds will appear red, at the opening of the Ear, when ripe.

A MAN of about 22 Years married a healthy young Woman, much of the same Age.—Soon after he went to *America*, and at the End of seven Years returned cachectic, anasarcaous, and deeply tinged with

with the Jaundice, endemical in hot Latitudes.— In a few Months after his Return his Wife became pregnant (with her first Child) of which she was delivered in due Time. The Child was born with a Jaundice upon it, and died about six Months after, under ascitical and icterical Symptoms, of which the Mother had not the least Impression.— Soon after this (and before the Husband, tho' much better, was quite cured) she became again with Child, and after about three Months Pregnancy turn'd yellow, and was the whole Time of her going with Child, and some Months after her Delivery, deeply affected with the Jaundice : But the Child was born quite fair, white, and healthy, without any thing of that Distemper on it ; and is still living, and the last born, —I make no Application—You must impute this Length of your Trouble to the wet Weather. I am most sincerely,

Dear Cousin,

Your most obliged

And most affectionate

B. Cooke.