

“ free from Pain, and had a very different Feeling  
 “ from what it had before. From that time, in less  
 “ than a Month, the Callus was intirely confirmed,  
 “ and the Patient recovered the Use of her Arm;  
 “ which, considering the oblique Direction of the  
 “ Fracture, and the long-continued Softness of the  
 “ Callus, has its natural Beauty and Straitness  
 “ wonderfully preserved.

“ I know that a Woman’s Pregnancy is mentioned  
 “ in general, by several Authors, as an Hindrance of  
 “ the Callus being so soon confirmed as in other  
 “ Circumstances. But, except the two Cases men-  
 “ tioned by *Turner*, and taken from *Hildanus*, I  
 “ do not remember to have read any History, where  
 “ the usual Oeconomy of Nature, in restoring a  
 “ fractured Bone, was so intirely, and for so long a  
 “ Time, interrupted; and where the Cause of such  
 “ an Interruption appears so plain, as in the Case I  
 “ have been here relating,” &c.

XXII. *A further Account of the Libellæ or  
 May-flies, from Mr. John Bartram of  
 Pennsylvania, communicated by Mr. Peter  
 Collinson, F. R. S.*

Read April 5. <sup>1750.</sup> SOME time ago I laid \* before the  
 Royal Society my Observations on  
 the wonderful Appearance of the *Libellæ* or May  
 flies of *England*. This Account being perused by my  
 ingenious

\* See this Trans. p 325.

ingenious Friend Mr. *Bartram*, excited him to make the following Remarks on their Appearance in *Pennsylvania*. By the Specimens before you, the May-flies of *America* have no very remarkable Difference from ours; excepting a few Days in the Fly State, they live all the Year a Water Insect. Their Bodies being replenished with an oily Matter, they easily quit their Husks, and rise up to the Surface of the Water, and disperse themselves a Mile or more back in the Woods, whilst others stay near the Water.

*May* the 4<sup>th</sup> 1749. I perceived many had attained Wings, and were very thick spread on the Bushes and Grass, by the River-sides. The second Day after their leaving their aquatic Abode they cast another Skin, after which their Tails are longer, and their Wings drier, and more transparent. The 5<sup>th</sup> and 6<sup>th</sup> was rainy, the 7<sup>th</sup> windy; so very few came out. The 8<sup>th</sup> were cool; so few were seen: But the 9<sup>th</sup> and 10<sup>th</sup>, being warm, many swarmed late in the Evening; and the 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup>, they swarmed abundantly. What I call swarming, was their gathering thick as Bees, near the Rivers, to lay their Eggs in the Water.

In their Flight they mount to the Tops of Trees, 20 or 30 Feet high: Their Motion is surprising, hovering up and down, rising and falling, 7 or 8 Feet at a time: This I take to be the Time and Manner of their Impregnation. After which they fly to the Brooks, cast out their Eggs, and perish immediately: Their Eggs sink directly to the Bottom, and lodge amongst the Mud and Gravel, and may be Food for some minute Water Animal. From their Eggs proceeds a deformed Grub, which subsists under  
Water,

Water, and is Food for Eels, until next Season, that it attains its Fly State, and then is Food for Fish and Fowl.

The Reason of their being so long in coming forth this Year was, the cold chilly Weather: Other Years, in a warm Season, in five Days they would have performed all their Functions, and disappeared.

We have two other smaller Kinds, that very much resemble the former, but they come later by two or three Weeks: What is most remarkable, the Males are black, and live several Days after the Females.

### ERRATA.

No. 491. p. 8. in the Title of Art. IV. for *D. Suarez, M. D.* read *Jacobum de Castro Sarmento, M. D.* Item, the same in the Contents.

No. 493. p. 193. l. 2. in the Title of Art. I. and in the Contents the same, for *July 15.* read *July 18*

Ibid. p. 213. *May 13.* for 33, 23. (the Height of the Barometer.) read 30, 23. and *July 24.* for 22, 66. read 29, 66.

No. 494. p. 342. l. 1. for *magis vasculum tenera,* read *vasculum, magis tenera,*