

the Tails grew so near, that the Return of both seemed to point to one Vent, tho' as I observed, the *Anus* was deficient. It had three Kidneys, one of them very large in proportion to the other two; so that I apprehend there was a Conjunction.

I send you this Account whilst the Matter is fresh in my Memory, and am,

Dear Sir,

Yours, &c.

P. Doddridge.

IV. *Abstract from a Letter sent by Monsieur Buffon, Member of the Royal Academy of Sciences at Paris, &c. to Martin Folkes Esq; Pr. R. S. concerning his Re-invention of Archimedes's Burning Specula.*

Read Oct. 27.
1748.

AS what I read some time since to our *Royal Academy* upon the Subject of my Re-invention of *Archimedes's** burning *Specula*, cannot appear in our Memoirs before the Year 1747, I think of publishing by themselves my Observations upon these Mirrors, as soon as I shall satisfy myself upon certain Particulars, by some new Experiments I am now preparing to make. The *Speculum* I have already constructed, and which is but six Feet broad and as many high, burns Wood at the Distance of 200 Feet, it melts Tin and Lead at

* See these *Transf.* No. 483.

at the Distance of above 120 Feet, and Silver at 50. The Theory which led me to this Discovery is founded upon two important Remarks, the one that the Heat is not proportional to the Quantity of Light, and the other that the Rays do not come parallel from the Sun. The first of those, which appears to be a Paradox, is nevertheless a Truth, of which one may easily satisfy one's self, by reflecting that Heat propagates itself even within Bodies; and that when one heats at the same time a large Superficies, the Firing is much quicker than when one only heats a small Portion of the same.

I am, &c.

*From the Chateau de Montbard in
Burgundy, Sept. 18. N.S. 1748.*

Buffon.

V. *An Essay on Quantity; occasioned by reading a Treatise, in which Simple and Compound Ratio's are applied to Virtue and Merit, by the Rev. Mr. Reid; communicated in a Letter from the Rev. Henry Miles D.D. & F.R.S. to Martin Folkes Esq; Pr.R.S.*

SECT. I.

What Quantity is.

Read Nov. 3. 1748. **S**INCE mathematical Demonstration is thought to carry a peculiar Evidence along with it, which leaves no Room for further Dispute; it may be of some Use, or Entertainment