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and that their *Classes* were so order'd by such *specifick* differences, that one might better know where to range them, as in a good perfection is now done in the *Vegitable Kingdom*, that is more numerous.

But to conclude, I observed the Eyes in the *Yellow Gurnard* were placed more on the top of the Head, and the Skin here covered almost half of them, like an *Eye-lid*; which I did not observe in the *Red Gurnard* whose Eyes were placed more at the sides of the Head. The Head likewise of the *Red Gurnard* was more protuberant, in the *Yellow*, flatter. The End of the *Rostrum*, the Teeth and Tongue in both were exactly alike; only in the Palat of the *Yellow Gurnard* I observed two *Cartiligenous* Bones, whose edges were bended downwards from the Palat, and did serve, as I supposed, for the hooking in and staying the Cartilage of the Tongue, when it makes a Compression for the forcing out the Water by the *Foramina* of the Head: Which Contrivance I did not find in the *Red Gurnard*, not having the like occasion for them.

This Fish being stale, I had not opportunity of dissecting it, and observing the *Viscera*: And shall only farther add, That the Gills had four *Osseous Radij* of each side. But of these more, if I happen to get another of this sort.

VII. Problema Medicinæ Cultoribus solvendum
proponit Guilielmus Cockburn, M. D. R. S. S.

Experientiâ constat quam diversæ sint medicamentorum Operationes pro Temperamentorum, Ætatum, ac ejusdem ætatis diversi statûs varietate. Magis vero conspicua sunt Emeticorum & Purgantium opera: Adeo, ut quæ provectiores atate quam lenissimè purgant, Infantes obruant: quæ justâ Cathartici Dose hodie propinamus, nimis

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nimis vel minimè nos crastino afficiunt die. Immo ad hanc omnem diversitatem operantur Temperie solummodo differentibus.

Quum igitur tam inviéta sit ubiq; difficultas in debita Pharmacorum evacuantium dose decernendâ; optandam esset, methodus quâ possimus eadem absq; dubio administrare.

Methodum hanc apodeicticis expeditis argumentis, simul & sigillis oclusam præsidi nostro commisit.

Rogat tamen Medicos quoslibet, quænam sit illa vel similis Methodus quâ sine errore dirigamur; eorumque solutiones ad Cal. Mart. 1705-6 exportabit, quas postmodum cum sua publicabit.

VIII. *Part of a Letter from Dr David Krieg, F. R. S. to the Publisher, concerning Cobalt, and the Preparations of Smalt and Arsenic.*

I Spent about 8 weeks in my own Country, and my chiefest Business was to enquire for the Minerals found thereabout, and to observe their preparations. First, I shall describe the preparation of the blue Colour, called *Smaltum*, which is made of *Cobalt* or *Cadmia nativa*, because it is not clearly described by any Author, as much as I know.

Now the *Cadmia* or *Cobalt* is a massie, heavy, grey shining Stone, found in a great quantity in the Mines about *Shneeberg*, and some other places of *Hermanduria*. It is very often mixed with *Marcasite*, sometimes with *Silver* and *Copper Oar*, yea, the *Silver* is (but seldom) pure in the Figure of *Hair*.

After they have pick'd out the *Cobalt*, and separated it from the common Stone, they beat it to Powder by an Engine or Machine, commonly used in Mines (called a *Poolwork*.) By that Operation, the Water carries away the light stuff and Sand, leaving the heaviest behind.

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