

A Description of the Uses of a certain Powder for yielding very smooth and close Mettal, and of easier carriage, &c.

THis was lately communicated to the Publisher by a German Physitian residing at *Frankfort on the Mayne*, in High-Dutch; the English of which is as follows;

1. The Powder, I speak of, maketh the Mettal so close and smooth, that it leaves not the least pit in the piece, and that a Gun so cast needs no boaring.

2. One third of the Mettal may be spared.

3. Such Guns remain clean and neat a long while. In the Year 1672. July 9. there was cast a Demy-canon; weighing 34 hundreds of weight. This being tryed with a bullet of 34 pounds weight, there was employed the first time 12 pounds of powder, the second time as much, the third time 15 pounds, and the fourth time 24 pounds, strong powder; all which tryals it endured very well. Besides, not long since there was cast a small Petard of only two pounds of this mettal, with which I broke in pieces a beam of a Rhine-foot square, the Petard remaining entire and perfect.

When you have occasion to carry these pieces over land, you shall not need so many horses by far as otherwise. And in great Ships and Galleons, that are sometimes mounted with 100 Guns each, you may of the matter of 200 make 300 Guns, performing the same, if not a better, effect. If his Majesty be pleased to command a *Specimen* of this Powder for a good tryal, we are ready to send it. It is not only easie to make, but also of small expence.

Extracts of two Letters of Dr. Swammerdam, concerning some Animals, that having Lungs are yet found to be without the Arterious Vein; together with some other curious particulars.

WE shall give the Reader both these Extracts in the same Language the Letters were written in. The first was written *Januar. 24. 1673. at Amsterdam, viz;*

ac præcipuè in Viscularum ejus oris ac limbis situm est, à quo omnibus cellulis, imò & ipsi tunica succingenti, capillaribus ac fere invisibilibus ramusculis prospicit.

Animalia, quæ suspicor eandem cum Ranis Pulmonis structuram obtinere, sunt Bufones, Lacertæ, Serpentes, Chamæleontes, Testudines, Salamandræ aquaticæ, & si quæ sunt alia pulmonibus Membranosis instructa: quorum structuram mihi nondum licuit perquirere. Suffecerit jam indicasse animalia, Virisque me longè sagacioribus viam monstrasse.

Cùm videam vobis grata fuisse, quæ de Nasti-cornis Scarabæi genitalibus nota veram, non alienum fore duxi eorum delineationem Cl. Tuae transmittere; in qua imprimis exhibentur non modò Testiculi ex unico funiculo, duos pedes & sex pollices longo, sed & Vasa Deferentia, semen copiosum ac album, quando leduntur, stillantia: nec non vesiculæ seu potius glandulæ seminales sex, admodum elegantes; glandularumq; seminalium ductus protensi, materiam seminalem sub-flavam (ut in hominibus ac brutis quoq; observatur) continentes.

An Accompt of some Books.

- I. LA STATIQUE, ou La Science des Forces Mouvantes, par le P. Ignace Gaston Pardies, de la Compagnie de Jesus. A Paris, 1673. in 12°.

THE Learned Author of this Book had proposed to himself to write a whole Body of *Mechanicks*, such an one, as might be accommodate to ordinary Capacities; he conceiving, that there had not been extant hitherto a compleat system of that Science, or, if there had, it did exceed the reach of most Readers: which latter he thinks to be the Character due to Dr. Wallis his Three Tomes de *Motu & Mechanice*, of which we gave an Account N°. 54. p. 1086. N°. 61. p. 2005. N°. 76. p. 2286.

But since the publication of this part of it, we understand that he hath been prevented and cut off by an intemely Death; being regretted by those that knew his frankness and strong inclinations to promote philosophical knowledge. How far he hath indeed advanced those other parts of this Design, and, whe-