1. It may be worth while for some ingenious Chymist, to open the body of Sand, thereby to discern its several principles, that are most prevalent: And then for some good Naturalist, to consider how it becomes so advantagious to Vegetation, and especially as to that part which concerns the prelisique Seed.

2. It may be also worth while for some ingenious Husbandmen or Gardner, to make some tryal of Sea-sand, if it will not some way answer expectation in these Eastern parts. For their encouragement,

1. There is Sand (not much unlike our Plymenth fand) which is taken up in the Thames about Erith, made use of by Brickmakers, and brought to them by Lighters at reasonable rates.

2. A Brickmaker told me, that by the fides of his Sand heap the grafs did better spring than elsewhere, and turned to a clover-

graß.

3. In our Country we have almost all kinds of Soyles, and Sand agrees very well with each of them: And therefore the conceit of a diversity of Soyle, and another nature of the ground, may be no discouragement.

4. 'Tis well known, that Sandwich Carrots and Pease are well esteemed, and they grow there, where the Sea sand has a little

over-blown and mixed with the Soyle.

3. If you find this do any good, the Thames may be fearched where is Oufe about Blackwall or a little lower, by removing about a foot of the mudd, to fee if there be not some beds of shelly substance or Coralline under it, as it is in the mouth of Falmouth; and if such stuff may be found, it may be cheaper than what is further fetched, and may do well.

4. But especially our Country men who are satisfied in the experience of it, should seriously bethink themselves, If there may not be an easier and cheaper way of Conveyance, for a greater quantity thereof to be brought up into the middle of the Country. And that

is the next thing we shall speak something to, &c.

I. HERMETIS ÆGYPTIORUM & CHEMICORUM SA-PIENTIA, ab Hermanni Convingii Animadversionibus vindicata

per Olaum Borrichium, Hafnie, A. 1674 in 4°.

He learned Author of this Vindication begins his Book with shewing against his famous Antagonist, that the Ægyptian Hermes, as an excellent Man, a great Physician & Chymist, bath well deserved of all Mankind, and consequently is highly injured by Conringius his Detractions. In this part the Reader will meet with store of

of good Learning and Antiquity, and fee, among many other particulars, that Pythagorus, one of the best and most solid Philosophers and Mathematicians among the Antients, learn'd his Philosophy in Ægrpt; that the great work of Transmutation is due to this Hermes; that from thence the Ægyptians acquired that immente wealth, whereby they raifed fuch vast structures; that those Ægyptians were (5) skilful in making artificial Gemms, as that in lustre and hardness they vyed with the true natural ones; those ancient Artists being masters of three things in this their work, which by the Grecians were called, dealors, Bapi, sous; the first implying a laxity of pores, sufficiently to imbibe the tineture; the second, a strong adhasion and due lustre of the color; the third, a hardning again of the body of the gemm, after the ingress of the tindure. Where our Author takes occasion to alledge a passage in Raymund Lulle his Test.ult ad Regem Anglia about a real change of Crystal into a very Adamantin mass; Vidisti (faith he) Rex, mirabilem illam projectionem, quam feci tecum Londini, in camera tua secreta S. Catharine, versus partem Castelli, super Crystallum solutum cum aqua argenti vivi, & converti eum in massam unam Adamantis finissimi, & virtuosi, plusquam naturalis, ex quo fecisti columnulas pro tabernaculo Dei.

He takes also notice of another particular, strictly observed among the old Ægy ptians, which is, That each of their Physitians applyed himself to the knowledge and cure of one only Disease, whereby he became very sagacious and expert in recovering his Patients of such a malady; which way could not but conduce very much to the improvement of Physick, and the benefit of the people.

Nor does he pass by, that the most celebrated Men of Greece travelled into Agypt to acquire acknowledge, and gained so considerable advantage of their travels, as answer'd their expectation.

And whereas Conringins tells us of his own thorow-infight in the manifold learning and knowledge of the Grecians, and admires the fame above that of other Nations, challenging our Author to shew any thing among the Egyptians like that of Aristotle's History of Animals, of Theophrastus of Plants, of Euclid and Archimedes in Mathematicks, of Ptolemy in Astronomy, of Hippocrates and Galen in Physick: Whereas, I say, Conringius does this; our Author scruples not to reply; I. That, without detracting any thing from the Grecians, if we should sit down and acquiesce in what the Greeks have deliver'd to us, the knowledge of Nature and the skill of Physick would be very impersed and lame. 2. That, Aristotle hatherred grossy in

many particulars in his History of Animals; and that for the greatest part of what is true therein, he was beholden for it to Fishermen, Hunts-men and Fowlers; besides what he had learn'd of Plato. instructed by the Ægyptians. 3. That Theophrastus hath made no thorough investigation of any Plant, and left a very great number of them untouch't, owing also much of what he knew to the Ægyptians. 4. That Euclid lived a while in Agypt, a Country much addicted to Geometry and Arithmetick: And that Archimedes found in Agypt his famous Cochles ad exhauriendas aguas; witness Diodorus Siculus. So that our Author judges it reasonable, we should think our selves more obliged to the first Inventors, than the Promoters, of useful knowledge. And as for Hippocrates and Galen, he faith, that Cos, the Country of the former, was so near Ægypt, that doubtless he thence received great advantage to his Medical knowledge; and that Democritus, his Master, who had been long acquainted with Ægypt, had questionless suggested many things to him: That Galen also had lived long at Alexandria, and was wont to advise the Grecian Candidats of Physick to travel thither for experience. As for Ptelemy, that he was no Grecian, but an Alexandrian, or a Pelafiot, and consequently of Agypt.

And feeing that Couringins inveighs with a virulent style against Hermes and Paracellus, our Author inquires the more narrowly into the Morals and Dostrines of Aristotle, so much extoll'd by the said Conringins, and shews, that the former of these two was much polluted, and the latter very jejune, persunstory, and erroneous. Where he takes occasion both to shew the many falsities deliver'd by Aristotle in his History of Animals, particularly in that of the Lyon, Eagle, and Crocodile, and to restifie the same, especially in the History of the Crocodile; of the Anatomy of which he here

gives us an accurate and confiderable account.

Again, forasinuch as Conringins undervalues Medicines prepared of Minerals, our Borrichius enumerates the Diseases, that are not cured but by them, such as the Lues venerea, stubborn Hypochondriacal affections, Epilepsies, inveterate Head-aches, latent Abscesses in the Body, old and malign Ulcers, &c. And Conringins being positive in afferting, that no force of fire is able to dissolve Gold, our Author mentions a way to perform it with a heat, at first scarce sensible, which he affirms to have been experimented by his late Majesty of Denmark, Frederick III; who commanded a thin plate of very pure Gold to be ground in a mortar, until it was reduced

reduced into a darkish powder, which being afterwards put into a Glass-retort, and driven by a strong heat, yielded a very red liquor, which tinged spirit of Wine, and became a good potable On this occasion he relates, what himself hath performed about Gold, viz, that, without the use of any fire, by the sole phlegm of common acetum, after a previous flight circumstance, (which yet he names not) out of very fine gold he drew a greenish Tincture, which, if in fummer it were left in an open glass, would, upon the exhalation of the liquor, be converted into a greenish falt, which conversion whilst it was doing, the liquor in the glass would stir up and down in a strange manner, shooting corporeal rays downwards, long and very fine, not unlike the rays of the Sun, only that they were whitish, and sending forth green branches upwards: Which spectacle he saith he hath often shew'd to his friends coming to see him; that salin texture lasting long, nor being dissolvable but by violence. To this he joyns his Affertion, grounded upon Experiments, that Corals and Gems yield Salts; which Conringius denieth.

Discoursing of the vertues of Præparations made of Animal substances, and particularly of the spirit of Eloud, he declares, that the volatil spirits of human bloud are more powerful in the curing of the Epilepsie, than those of the bloud of other animals; resuting withal the affertion of Conringius, importing, that the Ancients did not em-

ploy Human bloud but among their Magicks.

Examining the Controversie, Whether the vertues of Purgatives or Vomitives pass into their distilled waters, he recites an Experiment he made upon a Dog with the distilled water of black Hellebore, which was, that having given him 12 spoonfuls of it, he did within 4 hours vomit 4 times, and dunged twice, all very copiously.

Discussing the Question about the Resuscitation of Plants, (which he seems inclin'd to maintain, ) he alledges, for the countenancing of it, the Regeneration of bodies of other kinds, and amongst them he takes notice of Mercury, affirming, that that Substance, having been a whole year vexed by various fires, and reduced into water, turbith, and ashes, will, by the attraction of the Salt of Tartar amidst the slames, return to the pristin liquor: And that Lead, reverberated into Minium, melted into glass, reduced into a cerus, burnt to a Lytharge, in a word, tormented, torn, or burnt, as you please, will in a trice rise again into genuin Lead, by a bare dextrous application of Lixiviat Salt.

Discoursing of the Signature of Flants, concerning which Conrin-

gius affirms, that not any footstep of it is to be found in all Antiquity; our Author alledges to this famous Antiquary several passages. Out of Dioscorides, and Pliny, clearly evincing the missake of his Adversary.

Convingius affirming, that all forts of Diseases have been cur'd without Chymical remedies; our Borrichius maintains, that the Lues venerea, a confirm'd Dropsie, and Phthysis, and Cancer, and several other maladies will very hardly be cur'd by meer Galenical medicaments.

It being controverted, in what sense the Three Principles of the Chymists are contained in Bodies; our Author labours to explain it; relating with alan Experiment of his own, (too long to be inserted here,) in which he affirms to have obtained them all three out of common limpid water.

Concerning the Question, whether there be adually Salt in bodies before combustion or the operation of the Fire; Dr. Borrichius endeavours to defend the Affirmative; and in the end of that Difcourfe undertakes experimentally to shew, that, without any combustion at all, Corals, Cockel-shels, Stones, Gems, if they be ground to as fine dust as is possible, will, by a simple, though somewhat long, decoction in common distilled water, yield some true Cubical Salt, to be seen after the liquor is strained, and abstracted to a spissitude. The like he affirms he hath found by Experiment in Metals, Gold it self not excepted; the process whereof (which is by grinding) he describes at large lib. 2. c. 7; expecting the judgment of the Intelligent Reader upon it. After which he intimates, that though he could not obtain any visible Salt out of Quicksilver, yet he is persuaded from certain effects, that it holds some. For, when once he had crowded an oblong glass full of thin and well-polisht plates of Steel, and put to them so much highly desecated Mercury. as filled up all the interstices, and being very carefully shut, exposed it for three months to the Summer Sun; he at length breaking the glass, found, not what he looked for, to wit, an Amalgama of Mars, but what he looked not for, which was, that almost all those Steelplates were feifed on by ruft, though immerfed in the very body of the Quickfilver: which to him is an argument, that in it there was fomwhat saline but volatil, that excited the Iron to protrude the rust. This saline substance he thinks to be wanting in no Element; where he noteth, that he hath observ'd it not only in a mans breath, being in winter carefully collected in a glass, and by a gentle heat inspissated;

ted; but also in Air, crowded together in a wind-gun, which Air, he saith, when let out again into a Tin-vessel, turns into water, which, after a simple exhalation, is not without saltness.

What he hath thus proved of Salt, he also labours to prove of Sulphur and Mercury; I mean, their In-existence in all Mixts, whether Vegetable, Animal, or Mineral.

In the Conclusion of the whole, our Author makes it his business to shew. that Paracellus his Manners had been too severely represented; but, whatever they were, that that ought not to rob him of the praise due to his knowledge. Again, that being provoked by a crowd of Enemies, he had indulged too far to that human imperfection, which is inclined to retaliate with recriminations. Yet that he had not been a Magician in the worfer fenfesof which Crime the Learned Naudeus also had upon good grounds purged him. Moreover, that though his fervant Operinus, gain'd by his Masters Adversaries, had virulently inveighed against himsyet may there be gather'd out of that Oporinus his Epistle more matter of praise for Paracelsus, than (as our Author speaks )all his Enemies together have deserv'd; forasimuch as 'tis there faid, Fuisse in Paracelso mirabilem faciendi medicinam in omni morborum genere promptitudinem & felicitatem: Again, In curandis ulceribus, etiam deploratissimis miracula eum edidisse nulla vicins prescriptà aut observatà ratione: Item, Laudano suo ità gloriatum suisse, ut affirmare non dubitàrit, ejus solius usu se è mortus vivos reddere posse; ida; aliquoties, dum ille (Oporinus ) apud ipsum fuit, declaraffe.

Mentioning Paracelsus his skill in making the grand Elixir, (as they call it )our Author recites a Narration made in his hearing by the Count of Windishgratz, the Emperours Ambassador at the Danish Court, concerning a person, that was possessor of that great Arcanum, which because 'tis very curious and more than ordinarily circumstantiated, we shall take the liberty to transfer it hither, in the very words of our Author; viz. Vivere hodie in aula Casaris hominem 28 circiter annorum, ex Augustiniano pridem monacho nunc Chemicum, qui pulvisculo ex rubro purpurascente Metalla quavis in obryzum purgatissimum facile convertit. & plurims ibidem apud maximos, medioxumos, nonnunquam etiam minimos inclarescit Experiments: Vel triginta homines Viennæ oftendere confectum ab ipso se inspectantibus nobile illud metallum, atg, inter eos Illustrem Comitem Augustinum Wallensteinium pecius quotidie aureo torque operis illius Chemici insignire: Quin & Illustrem Comitem Breunerum contemplatum effe, Stannum mensarium in Aurum tiagentem; alios, metallorum alia. Ching, vite sit paulo dissolutiori, atq, magisterii (quod non dissimulat )ignarus existimare nonnullos, in monasterio quodam Pragensi, inter moribundi cujusdam Patris capsulus, the saurum hunc indeptum fuisse: Ipsum autem, chm ante menses aliquot ex febre periculosé decumberet, inquirente in rem Medico, professum ex indiciis quibusdam se inductum, ut latentem alicubi, quem olim Parcellus seposuerat lapidem Philosophicum, fodiendo investigaret, quasivisse sollicitè & reperisse.

R r II.The

II. The Garden of Eden, or an Accompt of the Culture of Flowers and Fruits now growing in England; with particular Rules, how to advance their Nature and Growth, as well in Seeds and Herbs, as in ordering of Trees and Shrubs: In 2 parts, in 80. written by Sir Hugh Platt Kt; newly reprinted.

His, I think, is the first time, I take notice of a small parcel of a lateWriter, only reprinted, and without additions. And this I do with great respects for the pains he took, to promote, sollicite and communicat Experiments and Inventions; to accommodate all occasions of Human Life, for all conditions of men, for Necessaries, and in all extremities; and for Delicacies, Treats and Entertainments, and generally with more than ordinary success. This will appear by a few Touches, which I shall here give upon three of his Books formerly publish't: 1. This bis Garden. 2. His Jewel-

bouse. 3. His Closet.

1. The fecond part of his Garden came forth possume A. 1660; in the preface of which 'tis said, That the First part had four Impressions in less than six years. This Collection (as himself computes them) is of 200 Experiments in that first part, and of 118 in the second part. Not, that he assumes them all for his cwn Experiments, nor gives his warrant for them all: But whatever he could obtain from all the samous Gardiners of his time about London or essewhere, by exchanges of his own discoveries, or by purchase, or by frequent visits, or by addresses, he briefly published, constantly naming or indicating the right Author, These he calls his long, costly and laborious Collections, not written at adventure, or by an imaginary conceit in a Scholars private study, but wrung out of the Earth by the painful hand of Experience, saithshe. And this small Manual may do Gardiners more good, than many large and methodical Volumes, which are fitter to surnish the Libraries of Theorists, than to grace our Gardens with the best demonstrations of this practical and operative part of Nature.

We want more such worthy persons, to report the progress of all Tryals and Improvements in these affairs, ever since his Majestics restauration. And now more especially, since the Inoculating of berbs, flowers and shrubs, and the graffing in Roots, and the mixing and uniting of Vegetables by the Roots, and the twists of the roots and stems, inclosed under one bark or rind, and many other operations upon bulbow flowers, are in advance, upon grounds of well-consirmed Experiments; and since the Anatome of Vegetables, which may direct the most curious operations, is so accurately handled (as will shortly surther appears) and withall since we begin to discourse so warmly of propagating Mulberies and Vines in England: For the later of which our Author hath given us good assurance and encouragement in his second part of

Gardens, 8eii.40.

Mean while we must acknowledge, that some of our English have lately done excellently well for Gardens and Orchards. And the first and best Matter in France, for the manner of Walling fruit: The Sieur le Gendre, and the French Gardiner were elegantly English't about the year 1660. But yet this was peculiar in our Author, that he excited the adventures of all the

expert Gardiners he could hear of, and communicated the best of their refults: which was more than any one man could, in so snort a time, perform: This can only be done at London, where there are Clubs of expert Gardiners, apt to assay Novelties and Rarities; and where they may have the sullest intelligence from other parts, and can most effectually disperse all over

England what is most for common good.

2. His Jewel-bouse came abroad A.1653. containing 149 chapters, perhaps more Experiments and Observations, than Chapters. To which the Printer has added anothers Discourse of Gems, Gums, &c. which some think not worthy to be annexed. Here also he assume that all for his own, but often vouches his Author, or Instance. And sometimes he may mistake, or be missinformed. Neither must it be expected, that I should give a Judgment on those few instances, which I shall contract here out of many, which may perhaps be no less considerable.

For Seamen he directs, how to preserve fresh water a long time from putresaction, c.5. He provides a wholesom, lasting and fresh Victual for the Navy, c.147. A portable easie Pump, to drain Fens, standing Pools and Ponds, to cast water on banks out of a River, and to do good service upon any suddain, or a great leak in a ship, c.146. To keep Oisters good some time, and fresh, c.88. The like for Lobsters, Craysishes, Prawns, &c.c.89. I omit the ways he first taught to preserve kose-leaves, and other slowers, the Juice of Orenges, Lemons, and other Juices in all particulars, all the year, Artichocks, (the dainties of Princes of old, and lately so in England, soith Musses;) all the Winter, c.15, and all the Lent, See Cluset, b.69; and diversother kind of fruit, c.1. here in his Jewel-house. He shews c.4. how to preserve and keep sweet any sowl or other slesh, for three weeks or a month, in excessive hot weather.

For Travellers he offers a light garment, yet sufficient against any rainy weather, c.149. if later cheats have not disgraced the invention: A drink for travellers ex tempore, when they cannot bear the change of beer on the road, c.25. Other helps to ease Horse or Man in their travels, c.24.83.87.

For Buildings, a cheap mortar, c.92. To make smooth or glistering floors or walls, c.90, &c. He shew'd great respects for honest Chymistry, and was careful in directing Distillations, for Salts, Spirits, Oyls, and shewing various uses of them: But he gives cautions against the cheating Alchymist, c.99; against some Vintners and Marchands of Wine, c.73; against frauds in some Brewers, c.9. For the Curiosity, he shews, How a Dutch Jeweller did cement two of the Queens Crystal-cups that were broken, and teaches other cements, c.50. But we expect better Cements from a more learned and honerable Philosopher. He hath many devices to ease the charge of Artificers; for cheap and long latting candles, and double lights, cheap suel, drinks in extream wants, and for delicacy. But above all, he advanced the Agriculture of England by Marle, Saline materials, as far as the Seas extend, which encompass these Islands; and by other Soyles, c.104; chiefly by Lime, and the way of Donshiring; whereby the most barren lands, hills and wasts may

Rr 2 be

be converted to bear the richest burthens of corn, hay, and grass.

3. His Closet was publisht in two parts, bound together, A. 1651. The first part contains Preserves, Candying, Pastes, Banqueting conceits, Cordial waters, Conserves, Medicins and Salves. The second part has more of the same, or the like, as Preserves, Conserves, Candying, Secrets in distillation, Cookery and Huswifry, Sweet powders, Ointments. Further, our Author, having enlarged noble tables, furnish't necessaries for multitudes of the most indigent, enriched husbandmen, found good employments for younger and fincking tamilies, affifted and encouraged ingenuous Arts and honett Trades, invented many new, and revived unregarded or too much neglected accommodations, and having taught, how the Sea-waters and Sea-fand may be made a fertilifing compost, and the very Earth a relieving suelshe thought it best to ingratiate with Ladies, to do many of the good offices of charity, to heal the tick, lame, maimed and wounded, who by poverty were unable to discharge Apothecaries bills, Physicians and Chirurgions; and to impart the elegant huswifry for delicacies, treats, and collations. He taught them, how to convert the wholesom plants and blossoms of their gardens and common fields hills and pastures, and the fruit of bushes, shrubs and hedges, and many of our taller trees, to be found food and rich wines; even to challenge the blood of the grape; and under the favour and with the affiltance of the Sugar-cane, and sometimes with the help of the Alembick, to carry the general applause, and to triumph in victory. And what had now become of our Sugar-plantations, if he had not so happily begun when he did, to shew us the excellencies and infinit uses of Sugar. And as to his Cookery, COLUMELLA, who spake the most he could against it, yet himself instructs, How to order Wine, and other liquors, pickles, gamons, and other food, for the best; and marmalades, quidenies, and conserves, most agreeable for the Empresses of those days, when the Bee Supplied the want of Sugar-canes. And good Cookery is as ancient, as the reputation of the most famous Physitians, a noble part of their profession. Emperours and Popes had always learned Physitians for Master-cooks. And our Author was follow'd with the Cabinets and Closets of both Illustrious and Learned Persons: The Countess of Arundel's Closet, the Countess of Kent's, Sr. Theod. Mayern's, Sr. Ken. Digby's, the Queen-like Cabinet, the accomplish't Cook, the French Cook, and Rabisha's Body of Cookery: These two last revised and perfected for the year 1673. And for sure and moderat Cookery, Muffets Improvement of Health, reprinted 1665, and as Dr. Bennet thinks, worth all that wrote before him, not excepting Platina, Apicius and Alexandrinus. At this day, Barbados and Jamaica are the better for Ligons skill in Cookery. And, if the Sturgeon of New England be the right Sturgeon, and so chosen and order'd, as Muffet directs, it may be a service (as of old) for an Imperial Table. And all Commanders and Purfers at Sea are concern'd for good marinal pickles, &c.

Errat, in Numb 112. Pag 256, l.10 r.other requifits. p.257, l.17. r.ferve out Apprenticeships. Errat, in this Numb 113. Pag. 287, l.10, r. receive delay. p.290, l. 24, r.debité.