



TO THE
RIGHT HONOURABLE

Sir Joseph Williamson, Knight,

PRINCIPAL

SECRETARY of STATE.

SIR,



*AVING begun this New Century of the Philo-
sophical Transactions near the time that your
Merits raised you to that eminent place you
are now possessed of; and considering also the
steddy inclinations, you do on all occasions ex-
press to advance the Ingenuous Arts: For
these and other good respects, I hold my self
obliged to present you with the first Volume of these my new
beginnings. In which Volume I adventure to mention sugges-
tions*

The Epistle Dedicatory.

sions pretending the Improvements of England by Agriculture and Trade; by Discipline and Industry; by Conduct and Manufactures.

The Rural Arts were the serious business, and the maturest, if not the Master-piece of learn'd Varro; and they founded the Roman Empire, supporting hardy Valour, and drawing the wheels of triumphant Grandeur. These adorned the famous Pensil Garden of the first Monarchy, and they enlarg'd the Spicy Groves and spacious Orchards of the Medes and Persians; as Trade and Navigation raised the greatest Cities, Wealth and Magnificence of all former and later Ages. And the Mathematicks perform'd all the true wonders in the Ages of wonder, both in the East and West, as far as the Sun does travel.

Of these Proposals there are some so manifestly and generally beneficial, so well tryed, or allowed, and encouraged by our express Laws, that they gave me the confidence to recommend them to the Generous. In this rank, I conceive, are, The spreading of practical Mathematicks in all our Trade-towns and Ports; the making great Rivers navigable, to increase Trade; the Fishery and Navigation; the several ways of fertilizing barren Lands, and of cultivating waste Grounds; the draining Boggles and infectious Fens, to render the Air wholesome in all the Neighbourhood, besides other Commodities proceeding from thence; the recovering the ancient reputation of our main Staple trade by the best kinds of Drapery and other Expedients; the increasing our Linnen-trade; the reducing our numbers of idle persons and vagrants to work for their own relief and the publick good; the making of Latton, and other curious works in Iron, Tin, Copper, and other Metals, which our own Mines afford; the making Salt and Salt-peter of our own at home, and enough for our own occasions; the making of fine Paper; the raising of Nurseries of Fruit-trees and Gardens of rare and exotic Vegetables, as far as our Soil and Climate will entertain them; to shelter, enrich and embellish all fair Mansions and Towns (chiefly our famous Universities, for an Exemplar to the rest,) with Groves of Fruit and Mulberry-trees, and fragrant Evergreens. Whatsoever does apparently conduce to the Health, Strength, Populousness and Welfare of these his Majesties Kingdoms, such Proposals I scruple not to recommend and endear to all that have hearty affections for their Native Country and their own Patrimony. Other Overtures which are out of my Sphere, I refer to a higher Experience;

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my Station and my Inclinations engaging me only to urge the fore-mention'd and the like concerns. Upon which account, Sir, I also scruple not to sollicite the continuance of your favour to advance the Designs of the Royal Society, according to his Majesties Intentions express'd in the Royal Charter, in regard of the great and many opportunities, that will offer themselves into your hands, both by foreign Negotiations, and domestick Concernments.

By the Experience of late Years we have grounds to hope, That, while our English Nobility and Gentlemen are pleas'd to bring home useful Arts and ingenious Discoveries of Nature from their Travels; the largeness of our Commerce abroad, and the growth of Arts at home, and the Observations of judicious Antiquaries will be a threefold advantage for the reputation and benefit of England, and cast an acceptable and obliging aspect over all his Majesties Dominions.

The most difficult and curious parts of Physiology and Geometry, of Opticks and Astronomy, have grown in England, and in the chief places of Christendom, in few years faster than some untractable men are willing they should grow. And these Abstrusities give good Satisfaction and sincere Delight to the deeply Intelligent and truly Reasonable. On the other hand, rural Diligence and Trade bring in to the Multitude a sensible Reward, with numberless varieties of Emoluments and Accommodations: In these also there hath something been lately done among us. In Scotland also they begin, on one hand, to erect Astronomical Observatories, and on the other, to call for Dutch Gardiners and Nurseries about their chief Cities and Universities. And Ireland shakes off her pristin laziness, being now busy in providing fine Linnen for themselves, Sails and Rigging for Ships, for Commerce, and for their Fishery; in tilling more Land, and in turning their mossy Grounds into Gardens of Potatoes. The very Wilderness of New England is, on a sudden, become a fruitful Orchard, fenc'd with Ships of their own building, and border'd with Stages and all furniture for their Fishery. And in less time, by God's Blessing, Jamaica may be the fairest Garden of the World.

And now, Sir, 'tis unnecessary, I should say more to you, either for the one or the other, for the more Sublime, or for the more useful Arts. Your own Genius, without any other impressment, will make Inferences leading to further Advantages. Mean while, I am full of hopes, I shall not miss of my honest aim, by what hath already appear'd from you in the fair Buildings of Queens College

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College in Oxford, with other considerable Monuments; which will be permanent Records of your Generosity towards the encouragement of Learning, Arts and Sciences: So that I shall not need to run out into more prolixity, than only to subscribe my self what really I am,

SIR,

Your very humble

and faithful

Servant,

Henry Oldenburg, S. R. S.