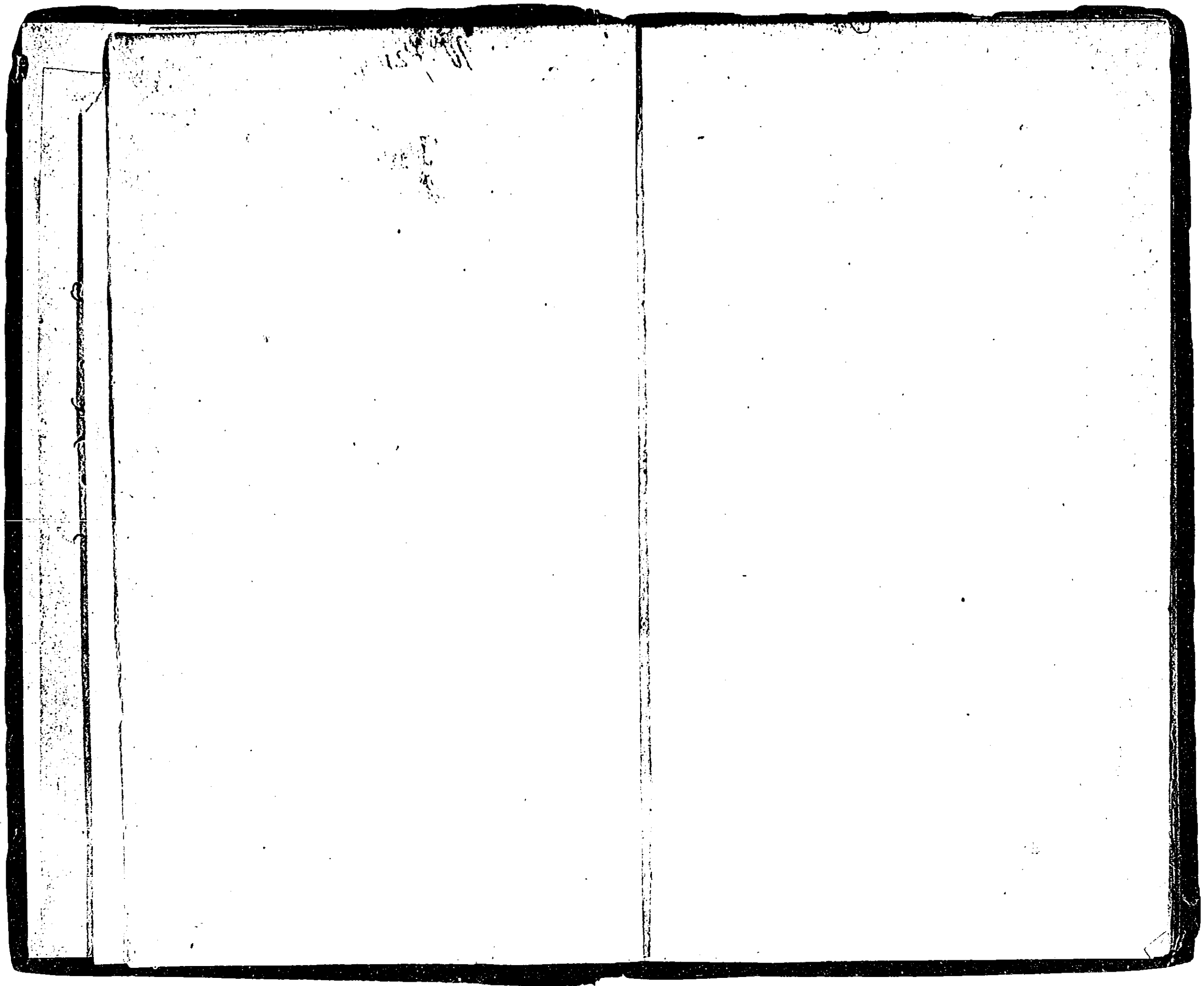


Ja' Kuk

Sr W. Petty



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LET this Book called *Political Arithmetick*, which was long since Writ by Sir *William Petty* deceased, be Printed.

Given at the Court at Whitehall the 7th day of Novemb. 1690.

Nottingham.

Political Arithmetick,
OR
A DISCOURSE



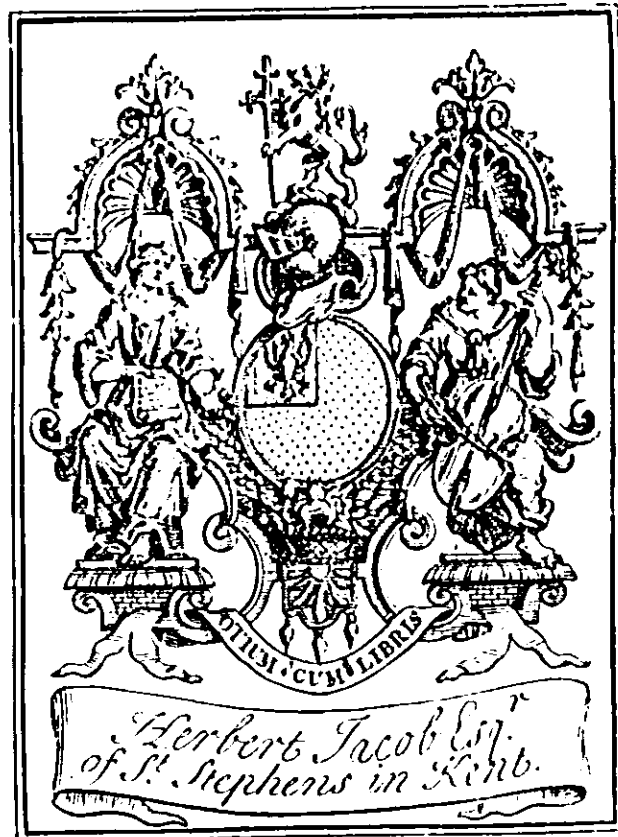
Concerning,

The Extent and Value of Lands, People, Buildings; Husbandry, Manufacture, Commerce, Fishery, Artizans, Seamen, Soldiers; Publick Revenues, Interest, Taxes, Superlucration, Registries, Banks; Valuation of Men, Increasing of Seamen, of Militia's, Harbours, Situation, Shipping, Power at Sea, &c. As the same relates to every Country in general, but more particularly to the Territories of His Majesty of *Great Britain*, and his Neighbours of *Holland, Zealand, and France.*

By Sir *WILLIAM PETTY*,
Late Fellow of the *Royal Society.*

London, Printed for Robert Clavel at the Peacock, and Hen. Mortlock at the Phoenix in St. Paul's Church-yard. 1691.

INNER TEMPLE



TO THE
KING'S
Most Excellent
MAJESTY.

SIR,

WHilest every one
meditates some
fit Offering for
Your Majesty, such as may
best agree with your happy
Exal-

A Dedication.

Exaltation to this Throne; I presume to offer, what my Father long since writ, to shew the weight and importance of the English Crown.

*It was by him stiled Political Arithmetick, in as much as things of Government, and of no less concern and extent, than the Glory of the Prince, and the happiness and greatness of the People, are by the Ordinary Rules of Arithmetick, brought into a sort of Demonstration. He was allowed by all, to be the Inventor of this Method of Instruction; where
the*

A Dedication.

the perplexed and intricate ways of the World, are explain'd by a very mean peice of Science; and had not the Doctrins of this Essay offended France, they had long since seen the light, and had found Followers, as well as improvements before this time, to the advantage perhaps of Mankind.

*But this has been reserved to the felicity of Your Majesty's Reign, and to the expectation which the Learned have therein; and if while in this, I do some honor to the Memory of a good Father, I
can*

A Dedication.

*can also pay Service, and some
Testimony of my Zeal and
Reverence to so great a King,
it will be the utmost Ambi-
tion of*

SIR,

Your Majesty's Most Dutiful
and Most Obedient Subject,

Shelborne.



PREFACE.

FOrasmuch as Men, who are
in a decaying condition, or
who have but an ill opinion of
their own Concernments, instead
of being (as some think) the more
industrious to resist the Evils they
apprehend, do contrariwise be-
come the more languid and inef-
fectual in all their Endeavours, nei-
ther caring to attempt or prose-
cute even the probable means of
their relief. Upon this Considera-
tion, as a Member of the Com-
mon-Wealth, next to knowing
the precise Truth in what condi-
tion the common Interest stands, I
would in all doubtful Cases think

a the

Preface.

the best, and consequently not despair, without strong and manifest Reasons, carefully examining whatever tends to lessen my hopes of the publick Welfare.

I have therefore thought fit to examin the following Perswasions, which I find too currant in the World, and too much to have affected the Minds of some, to the prejudice of all. *viz.*

The fears of many concerning the Welfare of England.

That the Rents of Lands are generally fall'n; that therefore, and for many other Reasons, the whole Kingdom grows every day poorer and poorer; that formerly it abounded with Gold, but now there is a great scarcity both of Gold and Silver; that there is no Trade nor Employment for the People, and yet that the Land is under-peopled; that Taxes have been many and great

Preface.

great; that *Ireland* and the Plantations in *America* and other Additions to the Crown, are a Burthen to *England*; that *Scotland* is of no Advantage; that Trade in general doth lamentably decay; that the *Hollanders* are at our heels; in the race of Naval Power; the *French* grow too fast upon both, and appear so rich and potent, that it is but their Clemency that they do not devour their Neighbors; and finally, that the Church and State of *England*, are in the same danger with the Trade of *England*; with many other dismal Suggestions, which I had rather stifle than repeat.

'Tis true, the Expence of foreign Commodities hath of late been too great; much of our Plate, had it remain'd Money, would have bet-

The real Prejudices of England.

Preface.

ter, served Trade; too many Matters have been regulated by Laws, which Nature, long Custom, and general Consent, ought only to have governd; the Slaughter and Destruction of Men by the late Civil Wars and Plague have been great; the Fire at *London*, and Disaster at *Chatham*, have begotten Opinions in the *Vulgus* of the World to our Prejudice; the Non-conformists increase; the People of *Ireland* think long of their Settlement; the *English* there apprehend themselves to be Aliens, and are forced to seek a Trade with Foreigners, which they might as well maintain with their own Relations in *England*. But notwithstanding all this (the like whereof was always in all Places), the Buildings of *London* grow great and glorious; the *American* Plantations

*The Im-
prove-
ments of
England.*

Preface.

tions employ four Hundred Sail of Ships; Actions in the *East-India* Company are near double the principal Money; those who can give good Security, may have Money under the Statute-Interest; Materials for building (even Oaken-Timber) are little the dearer, some cheaper for the rebuilding of *London*; the Exchange seems as full of Merchants as formerly; no more Beggars in the Streets, nor executed for Thieves, than heretofore; the Number of Coaches, and Splendor of Equipage exceeding former Times; the publique Theatres very magnificent; the King has a greater Navy, and stronger Guards than before our Calamities; the Clergy rich, and the Cathedrals in repair; much Land has been improved, and the Price of Food so reasonable, as that Men refuse

Preface

to have it cheaper, by admitting of *Irish Cattle*; And in brief, no Man needs to want that will take moderate pains. That some are poorer than others, ever was and ever will be: And that many are naturally querulous and envious, is an Evil as old as the World.

These general Observations, and that Men eat, and drink, and laugh as they use to do, have encouraged me to try if I could also comfort others, being satisfied my self, that the Interest and Affairs of *England* are in no deplorable Condition.

The Author's Method and Manner of Arguing.

The Method I take to do this, is not yet very usual; for instead of using only comparative and superlative Words, and intellectual Arguments, I have taken the course (as a Specimen of the Political Arithmetick

Preface.

arithmetick I have long aimed at) to express my self in Terms of *Number, Weight, or Measure*; to use only Arguments of Sense, and to consider only such Causes, as have visible Foundations in Nature; leaving those that depend upon the mutable Minds, Opinions, Appetites, and Passions of particular Men, to the Consideration of others: Really professing my self as unable to speak satisfactorily upon those Grounds (if they may be call'd Grounds), as to foretel the cast of a Dye; to play well at Tennis, Billiards, or Bowles, (without long practice,) by virtue of the most elaborate Conceptions that ever have been written *De Projectilibus & Missilibus*, or of the Angles of Incidence and Reflection.

Now

Preface.

The Nature of his Positions and Suppositions.

Now the Observations or Positions expressed by *Number, Weight, and Measure*, upon which I bottom the ensuing Discourses, are either true, or not apparently false, and which if they are not already true, certain, and evident, yet may be made so by the Sovereign Power, *Nam id certum est quod certum reddi potest*, and if they are false, not so false as to destroy the Argument they are brought for; but at worst are sufficient as Suppositions to shew the way to that Knowledge I aim at. And I have withal for the present confined my self to the Ten principal Conclusions hereafter particularly handled, which if they shall be judged material, and worthy of a better Discussion, I hope all ingenious and candid Persons will rectifie the Errors, Defects, and Im-

Preface.

Imperfections, which probably may be found in any of the Positions, upon which these Ratiocinations were grounded. Nor would it misbecome Authority it self, to clear the Truth of those Matters which private Endeavours cannot reach to.

The

T H E
Principal Conclusions
O F T H I S
T R E A T I S E
A R E,

CHAP. I. *That a small Country, and few People, may by their Situation, Trade, and Policy, be equivalent in Wealth and Strength, to a far greater People, and Territory. And particularly, How conveniencies for Shipping, and Water Carriage, do most Eminently, and Fundamentally, conduce thereunto.* Pag. 1.

Chap. II. *That some kind of Taxes, and Publick Levies, may rather increase than diminish the Common-Wealth.* pag. 35
Chap.

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- Chap. III. *That France cannot, by reason of Natural and Perpetual Impediments, be more powerful at Sea, than the English, or Hollanders.* 51
- Chap. IV. *That the People, and Territories of the King of England, are Naturally near as considerable, for Wealth, and Strength, as those of France.* pag. 64
- Chap. V. *That the Impediments of Englands Greatness, are but contingent and removeable.* pag. 87
- Chap. VI. *That the Power and Wealth of England, hath increased above this forty years.* pag. 96
- Chap. VII. *That one tenth part, of the whole Expence, of the King of England's Subjects; is sufficient to maintain one hundred thousand Foot, thirty thousand Horse, and forty thousand Men at Sea, and to defray all other Charges, of the Government: both Ordinary and Extraordinary, if the same were regularly Taxed, and Raised.* pag. 101
- Chap. VIII. *That there are spare Hands enough among the King of England's Subjects, to earn two Millions per annum, more than they now do, and there are Employments, ready, proper,*

The Contents.

- proper, and sufficient for that purpose.* pag. 104
- Chap. IX. *That there is Money sufficient to drive the Trade of the Nation.* pag. 110
- Chap. X. *That the King of England's Subjects, have Stock, competent, and convenient to drive the Trade of the whole Commercial World.* pag. 112
-
- ERRATA.
-

ERRATA.

PAge 7. line 25. read *the Rent*. p. 8. l. 21. r. *a part*.
p. 20. l. 3. r. *for cheap*. p. 21. l. 14. r. *cold, moist*.
p. 26. l. 7. r. *that Church*. p. 32. l. 7. r. *yearly profit*.
l. 18. r. *to be the value*. p. 47. l. 4. r. *fifty thousand*.
l. 28. r. *sixteen thousand*. p. 49. l. 13. r. *the said half*
together. p. 52. l. 6. r. *should bring*. p. 59. l. 24. r. *they*
coast. p. 72. l. 8. r. *or above*. p. 91. l. 9. r. *Exotics*.
p. 95. l. 13. r. *paying for*.

CHAP.

CHAP. I.

That a small Country and few People, by its Situation, Trade, and Policy, may be equivalent in Wealth and Strength, to a far greater People and Territory: And particularly that conveniencies for Shipping and Water-Carriage, do most Eminently and Fundamentally conduce thereunto.

THis first principal Conclusion by reason of its length, I consider in three Parts; whereof the first is, That a small Country and few People, may be equivalent in Wealth and Strength to a far greater People and Territory.

This part of the first principal Conclusion needs little proof; forasmuch as one Acre of Land, may bear as much Corn and feed as many Cattle as twenty, by the difference of the Soil; some parcel of Ground is naturally so defensible, as that an Hundred Men being pos-

How one Man by art and one Acre of Land by improvement may be equivalent to many.

B fessed

essed thereof, can resist the Invasion of Five Hundred; and bad Land may be improved and made good; Bog may by draining be made Meadow; Heathland may (as in *Flanders*) be made to bear Flax and Clover grass, so as to advance in value from one to an Hundred; The same Land being built upon, may centuple the Rent which it yielded as Pasture; one Man is more nimble or strong, and more patient of labor than another; one Man by Art may do as much work, as many without it; viz. one Man with a Mill can grind as much Corn, as twenty can pound in a Mortar; one Printer can make as many Copies, as an Hundred Men can write by hand; one Horse can carry upon Wheels, as much as Five upon their Backs; and in a Boat, or upon Ice, as Twenty: So that I say again, this first point of this general Position, needs little or no proof. But the second and more material part of this Conclusion is, that this difference in Land and People, arises principally from their Situation, Trade, and Policy.

To

To clear this, I shall compare *Holland* and *Zealand*, with the Kingdom of *France*, viz. *Holland* and *Zealand* do not contain above one Million of *English* Acres, whereas the Kingdom of *France* contains above 80.

A Comparison of *Holland* and *Zealand* with *France*.

1 m *Holland* & *Zealand*
80 m *France*

Now the Original and Primitive difference holds proportion as Land to Land, for it is hard to say, that when these places were first planted, whether an Acre in *France* was better than the like quantity in *Holland* and *Zealand*; nor is there any reason to suppose, but that therefore upon the first Plantation, the number of Planters was in proportion to the quantity of Land; wherefore, if the People are not in the same proportion as the Land, the same must be attributed to the Situation of the Land, and to the Trade and Policy of the People superstructed thereupon.

The next thing to be shewn is, that *Holland* and *Zealand* at this day, is not only an eightieth part as rich and strong as *France*, but that it hath advanced to one third or thereabouts, which I think will appear upon the Ballance of the following particulars, viz.

Holland & *Zealand*
= $\frac{1}{3}$ of *France*

B 2

As

That the Lands of France, are to the Lands of Holland and Zealand, as 8 to 1 in value.

As to the Wealth of *France*, a certain Map of that Kingdom, set forth Anno 1647. represents it to be fifteen Millions, whereof six did belong to the Church, the Author thereof (as I suppose) meaning the Rents of the Lands only: And the Author of a most Judicious discourse of Husbandry (supposed to be Sir Richard Weston,) doth from reason and experience shew, that Lands in the Netherlands, by bearing Flax, Turneps, Clover-grass, Madder, &c. will easily yield 10 *l.* per Acre; so as the Territories of *Holland* and *Zealand*, should by his account yield at least Ten Millions *per annum*, yet I do not believe the same to be so much, nor *France* so little as abovesaid, but rather, that one bears to the other as about 7, or 8 to 1.

The Buildings of Amsterdam are about half in value to those at Paris.

The People of *Amsterdam*, are one third of those in *Paris* or *London*, which two Cities differ not in People a twentieth part from each other, as hath appeared by the Bills of Burials and Christnings for each. But the value of the Buildings in *Amsterdam*, may well be half that of *Paris*, by reason of the Foundations, Grafts, and Bridges, which

in

in *Amsterdam* are more numerous and chargeable than at *Paris*. Moreover the Habitations of the poorest People in *Holland* and *Zealand*, are twice or thrice as good as those of *France*; but the People of the one to the People of the other, being but as thirteen to one, the value of the housing must be as about five to one.

The Housing in France above five times the value of those in Holland and Zealand.

The value of the Shipping of *Europe*, being about two Millions of Tuns, I suppose the *English* have Five Hundred Thousand, the *Dutch* Nine Hundred Thousand, the *French* an Hundred Thousand, the *Hamburgers*, and the Subjects of *Denmark*, *Sweden*, and the Town of *Danfick* two Hundred and Fifty Thousand, and *Spain*, *Portugal*, *Italy*, &c. two Hundred and Fifty Thousand; so as the Shipping in our case of *France* to that of *Holland* and *Zealand*, is about one to nine, which reckoned as great and small, new and old, one with another at 8 *l.* per Tun, makes the worth to be as Eight Hundred Thousand Pounds, to Seven Millions, and two Hundred Thousand Pounds. The *Hollanders* Capital in the *East India* Company, is worth above Three

The Shipping of Holland 9 times that of France.

The Comparison of Holl. and France in the India's

B 3

Millions,

Millions, where the *French* as yet have little or nothing.

The ex-
portations
of *France*
and *Holl.*
and is as
21 to 5.

The value of the Goods exported out of *France* into all Parts, are supposed Quadruple to what is sent to *England* alone; and consequently in all about Five Millions, but what is exported out of *Holland* into *England* is worth Three Millions; and what is exported thence into all the World besides, is sextuple to the same.

The Re-
venues of
France.

The Monies Yearly raised by the King of *France*, as the same appears by the Book intituled (*The State of France*) Dedicated to the King, Printed Anno 1669. and set forth several times by Authority, is 82000000 of *French* Livres, which is about $6\frac{1}{2}$ Millions of Pounds Sterling, of which sum the Author says, that one fifth part was abated for non-valuers or Insolvencies, so (as I suppose) not above Five Millions were effectually raised: But whereas some say, that the King of *France* raised Eleven Millions as the $\frac{1}{3}$ of the effects of *France*; I humbly affirm, that all the Land and Sea Forces, all the Buildings and Entertainments, which we have heard by common Fame, to have been
set

set forth and made in any of these seven last Years, needed not to have cost Six Millions Sterling; wherefore, I suppose he hath not raised more, especially since there were one fifth Insolvencies, when the Tax was at that pitch. But *Holland* and *Zealand*, paying 67 of the 100, ^{The Taxes} paid by all the United Provinces, and ^{paid by} the City of *Amsterdam* paying 27 of ^{Holl. and} the said 67; It follows that if *Amster- Zealand.* *dam* hath paid 4000 *l.* Flemish *per diem*, or about 1400000 *l.* *per annum*, or 800000 *l.* Sterling; that all *Holland* and *Zealand*, have paid 2100000 *l.* *per annum*: Now the reasons why I think they pay so much, are these, *viz.*

1. The Author of the State of the *Netherlands* saith so.

2. Excise of Victual at *Amsterdam*, seems above half the Original value of the same, *viz.*

Ground Corn pays 20 Stivers the Bushel, or 63 Gilders the Last; Beer 113 Stivers the Barrel, Housing $\frac{1}{6}$ of Rent, Fruit $\frac{1}{8}$ of what it cost; other Commodities $\frac{1}{7}, \frac{1}{8}, \frac{1}{9}, \frac{1}{12}$; Salt *ad libitum*, all weighed Goods pay besides the Premises a vast sum; now if the expence of the People of *Amsterdam* at a medi-

um, and without Excise were 8 *l. per annum*, whereas in *England* 'tis 7 *l.* then if all the several Imposts above named, raise it Five Pound more, there being 160000 Souls in *Amsterdam*, the summ of 800000 *l. Sterling per annum* will thereby be raised.

3. Though the expence of each head, should be 13 *l. per annum*; 'tis well known that there be few in *Amsterdam*, who do not earn much more than the said expence.

4. If *Holland* and *Zealand* pay *p. an.* 2100000 *l.* then all the Provinces together, must pay about 3000000 *l.* less than which summ *per annum*, perhaps is not sufficient to have maintained the Naval War with *England*, 72000 Land Forces, besides all other the ordinary Charges of their Government, whereof the Church is there apart: To conclude, it seems from the Premisses, that all *France* doth not raise above thrice as much from the publick charge, as *Holland* and *Zealand* alone do.

The Difference of interest between *Holland* & *France*.

5. Interest of Money in *France*, is 7 *l. per cent.* but in *Holland* scarce half so much.

6. The

6. The Countries of *Holland* and *Zealand*; consisting as it were of Islands guarded with the Sea, Shipping, and Marshes, is defensible at one fourth of the charge, that a plain open Country is, and where the seat of War may be both Winter and Summer; whereas in the others, little can be done but in the Summer only.

7. But above all the particulars hitherto considered, that of superlucration ought chiefly to be taken in; for if a Prince have never so many Subjects, and his Country be never so good, yet if either through sloth, or extravagant expences, or Oppression and Injustice, whatever is gained shall be spent as fast as gotten, that State must be accounted poor; wherefore let it be considered, how much or how many times rather, *Holland* and *Zealand*, are now above what they were 100 years ago, which we must also do of *France*: Now if *France* hath scarce doubled its Wealth and Power, and that the other have decupled theirs; I shall give the preference to the latter, even although the $\frac{2}{10}$ increased by the one, should not exceed the one half gained by the other, because

The superlucration between *France* and *Holland*.

because one has a store for Nine Years, the other but for one.

To conclude, upon the whole it seems, that though *France* be in People to *Holland* and *Zealand* as 13 to 1, and in quantity of good Land, as 80 to one, yet is not 13 times richer and stronger, much less 80 times, nor much above thrice, which was to be proved.

The causes of the difference between *France* and *Holl.*

Having thus dispatched the two first Branches of the first Principal conclusion; it follows, to shew that this difference of Improvement in Wealth and Strength, arises from the Situation, Trade, and Policy of the places respectively, and in particular from Conveniencies for Shipping and Water Carriage.

Many Writing on this Subject do so magnifie the *Hollanders* as if they were more, and all other Nations less than Men (as to the matters of Trade and Policy) making them Angels, and others Fools, Brutes, and Sots, as to those particulars; whereas I take the Foundation of their achievements to lie originally in the Situation of the Country, whereby they do things inimitable by others, and have advantages whereof others are incapable.

First,

First, The Soil of *Holland* and *Zealand* is low Land, Rich and Fertile; whereby it is able to feed many Men, and so as that Men may live near each other, for their mutual assistance in Trade. I say, that a Thousand Acres, that can feed 1000 Souls, is better than 10000 Acres of no more effect, for the following reasons, viz.

The reasons why rich Land is better than course Land tho of the same Rent, and consequently why *Holl.* is better than *Fran.*

1. Suppose some great Fabrick were in Building by a Thousand Men, shall not much more time be spared if they lived all upon a Thousand Acres, than if they were forced to live upon ten times as large a Scope of Land.

2. The charge of the cure of their Souls, and the Ministry would be far greater in one case than in the other; as also of mutual defence in case of Invasion, and even of Thieves and Robbers: Moreover the charge of the administration of Justice would be much easier, where Witnesses and Parties may be easily Summoned, Attendance less expensive, when Mens Actions would be better known, when wrongs and injuries could not be covered, as in thin peopled places they are.

Lastly,

Lastly, those who live in Solitary places, must be their own Soldiers, Divines, Physicians, and Lawyers, and must have their Houses stored with necessary Provisions (like a Ship going upon a long Voyage,) to the great wast, and needless expence of such Provisions; the value of this first convenience to the *Dutch*, I reckon or estimate to be about 100000 *l. per annum.*

The advantages from the level and windmills of *Holl.*

2ly, *Holland* is a Level Country, so as in any part thereof, a Windmill may be set up, and by its being moist and vaporous, there is always wind stirring over it, by which advantage the labor of many thousand Hands is saved, forasmuch as a Mill made by one Man in half a Year, will do as much Labor, as Four Men for Five Years together. This advantage is greater or less, where employment or ease of Labour is so; but in *Holland*'tis eminently great, and the worth of this conveniency is near an Hundred and Fifty Thousand Pounds.

The advantages from *Holl.* of Manufacture & Commerce. The Situation of *Holl.* & *Zeal.* upon the Mouths of three great Rivers

3ly. There is much more to be gained by Manufacture than Husbandry, and by Merchandize than Manufacture; but *Holland* and *Zealand*, being seated at the mouths of three long great Rivers,

vers, and passing through Rich Countries, do keep all the Inhabitants upon the sides of those Rivers but as Husbandmen, whilst themselves are the Manufacturers of their Commodities, and do dispencc them into all Parts of the World, making returns for the same, at what prices almost they please themselves; and in short, they keep the Keys of Trade of those Countries, through which the said Rivers pass; the value of this third conveniency, I suppose to be 200000 *l.*

4ly. In *Holland* and *Zealand*, there is scarce any place of work, or business one Mile distant from a Navigable Water, and the charge of Water carriage is generally but $\frac{1}{10}$, or $\frac{1}{20}$ part of Land carriage; Wherefore if there be as much Trade there as in *France*, then the *Hollanders* can out-sell the *French* $\frac{1}{10}$ of all the expence, of all Travelling Postage and carriage whatsoever, which even in *England* I take to be 300000 *l. p. an.* where the very Postage of Letters, costs the People perhaps 50000 *l. per annum*, though Farmed at much less, and all other Labour of Horses, and Porters, at least six times as much; The value of this

Nearness to navigable Waters.

this conveniency I estimate to be above Three Hundred Thousand pounds *per annum*.

The defensibility of Holland.

5. The defensibility of the Country, by reason of its Situation in the Sea upon Islands, and in the Marshes, Impassible ground Diked and Trenched, especially considering how that place is aimed at for its Wealth; I say the charge of defending that Country, is easier than if it were a plain Champion, at least 200000 *l. per annum*.

Harbouring of Shipping at small expence.

6. *Holland* is so considerable for keeping Ships in Harbour with small expence of Men, and ground Tackle, that it saves *per annum* 200000 *l.* of what must be spent in *France*. Now if all these natural advantages do amount to above one Million *per annum* Profits, and that the Trade of all *Europe*, nay of the whole World, with which our *Europeans* do Trade, is not above 45 Millions *p. an.* and if $\frac{1}{50}$ of the value be $\frac{1}{2}$ of the Profit, it is plain that the *Hollander* may Command and Govern the whole Trade.

Advantages from Fishing.

7. Those who have their Situation thus towards the Sea, and abound with Fish at home, and having also the command

mand of Shipping, have by consequence the Fishing Trade, whereof that of Herring alone, brings more yearly Profit to the *Hollanders* than the Trade of the *West Indies* to *Spain*, or of the *East* to themselves, as many have affirmed, being as the same say *viis & modis* of above three Millions *per annum* Profit.

8. It is not to be doubted, but those who have the Trade of Shipping and Fishing, will secure themselves of the Trade of Timber for Ships, Boats, Masts, and Cask; of Hemp for Cordage, Sails, and Nets; of Salt, of Iron; as also of Pitch, Tar, Rosin, Brimstone, Oil, and Tallow, as necessary Appurtenances to Shipping and Fishing.

Advantages by Naval Provisions.

9. Those who predominate in Shipping, and Fishing, have more occasions than others to frequent all parts of the World, and to observe what is wanting or redundant every where, and what each People can do, and what they desire, and consequently to be the Factors, and Carriers for the whole World of Trade. Upon which ground they bring all Native Commodities to be Manufactured at home, and carry the same back, even to that Country in which

Fitness for Universal Trade.

which they grew, all which we see.

For, do they not work the Sugars of the *West-Indies*? The Timber and Iron of the *Baltick*? The Hemp of *Russia*? The Lead, Tin, and Wooll of *England*? The Quick-silver and Silk of *Italy*? The Yarns, and Dying Stuffs of *Turkey*, &c. To be short, in all the ancient States, and Empires, those who had the Shipping, had the Wealth, and if 2 per Cent. in the price of Commodities, be perhaps 20 per Cent. in the gain: it is manifest that they who can in forty five Millions, undersel others by one Million, (upon accompt of natural, and intrinsic advantages only) may easily have the Trade of the World without such Angelical Wits and Judgments, as some attribute to the *Hollanders*.

Having thus done with their Situation, I come now to their Trade.

Artificial
advan-
tages of
Trade.

It is commonly seen, that each Country flourisheth in the Manufacture of its own Native Commodities, viz. *England* for woollen Manufacture, *France* for Paper, *Luic-land* for Iron Ware, *Portugal* for Confectures, *Italy* for Silks; upon which Principle it follows, that *Holland* and *Zealand* must flourish most
in

in the Trade of Shipping, and so become Carriers and Factors of the whole World of Trade. Now the advantages of the Shipping Trade are as followeth, viz.

Husbandmen, Seamen, Soldiers, Artizans and Merchants, are the very Pillars of any Common-Wealth; all the other great Professions, do rise out of the infirmities, and miscarriages of these; now the Seaman is three of these four. For every Seaman of industry and ingenuity, is not only a Navigator, but a Merchant, and also a Soldier; not because he hath often occasion to fight, and handle Arms; but because he is familiarized with hardship and hazards, extending to Life and Limbs; for Training and Drilling is a small part of Soldiery, in respect of this last mentioned Qualification; the one being quickly and presently learned, the other not without many years most painful experience: wherefore to have the occasion of abounding in Seamen, is a vast conveniency.

Husbandmen, Seamen, Soldiers, Artizans, and Merchants, are the very Pillars of a Common-Wealth, and a Seaman is three of them.

2. The Husbandman of *England* earns but about 4 s. per Week, but the Seamen have as good as 12 s. in Wages,

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Victu-

A Seaman
equivalent
to three
Husband-
men.

Victuals (and as it were housing) with other accommodations, so as a Seaman is in effect three Husbandmen; wherefore there is little Ploughing, and Sowing of Corn in *Holland* and *Zealand*, or breeding of young Cattle: but their Land is improved by building Houses, Ships, Engines, Dikes, Wharfs, Gardens of pleasure, extraordinary Flowers and Fruits; for Dairy and feeding of Cattle, for Rape, Flax, Madder, &c. The Foundations of several advantageous Manufactures.

3. Whereas the Employment of other Men is confined to their own Country, that of Seamen is free to the whole World; so as where Trade may (as they call it) be dead here or there, now and then, it is certain that some where or other in the World, Trade is always quick enough, and Provisions are always plentiful, the benefit whereof, those who command the Shipping enjoy, and they only.

Silver,
Gold, and
Jewels, are
Universal
Wealth.

4. The great and ultimate effect of Trade is not Wealth at large, but particularly abundance of Silver, Gold, and Jewels, which are not perishable, nor so mutable as other Commodities, but

but are Wealth at all times, and all places: Whereas abundance of Wine, Corn, Fowls, Flesh, &c. are Riches but *hic & nunc*, so as the raising of such Commodities, and the following of such Trade, which does store the Country with Gold, Silver, Jewels, &c. is profitable before others. But the Labour of Seamen, and Freight of Ships, is always of the nature of an Exported Commodity, the overplus whereof, above what is Imported, brings home money, &c.

5. Those who have the command of the Sea Trade, may Work at easier Freight with more profit, than others at greater: for as Cloth must be cheaper made, when one Cards, another Spins, another Weaves, another Draws, another Dresses, another Presses and Packs; than when all the Operations above-mentioned, were clumsily performed by the same hand; so those who command the Trade of Shipping, can build long slight Ships for carrying Masts, Fir-Timber, Boards, Balks, &c. And short ones for Lead, Iron, Stones, &c. One sort of Vessels to Trade at Ports where they need never lie a ground, others where they must jump upon the Sand

Reasons
why the
Hollan-
ders Sail
for less
Freight.

twice every twelve hours; One sort of Vessels, and way of manning in time of Peace, and cheap gross Goods, another for War and precious Commodities; One sort of Vessels for the turbulent Sea, another for Inland Waters and Rivers; One sort of Vessels, and Rigging, where haste is requisite for the Maidenhead of a Market, another where $\frac{1}{2}$ or $\frac{1}{3}$ part of the time makes no matter. One sort of Mastng and Rigging for long Voyages, another for Coasting. One sort of Vessels for Fishing, another for Trade: One sort for War for this or that Country, another for Burthen only. Some for Oars, some for Poles, some for Sails, and some for draught by Men or Horses, some for the Northern Navigations amongst Ice, and some for the South against Worms, &c. And this I take to be the chief of several Reasons, why the *Hollanders* can go at less Freight than their Neighbours, *viz.* because they can afford a particular sort of Vessels for each particular Trade.

I have shewn how Situation hath given them Shipping, and how Shipping hath given them in effect all other
Trade,

Trade, and how Foreign Traffick must give them as much Manufacture as they can manage themselves, and as for the overplus, make the rest of the World but as Workmen to their Shops. It now remains to shew the effects of their Policy, superstructed upon these natural advantages, and not as some think upon the excess of their Understandings. The Policy of Holland.

I have omitted to mention the *Hollanders* were one hundred years since, a poor and oppressed People, living in a Country naturally cold and unpleasant: and were withal persecuted for their Heterodoxy in Religion.

From hence it necessarily follows, that this People must Labour hard, and set all hands to Work: Rich and Poor, Young and Old, must study the Art of Number, Weight, and Measure; must fare hard, provide for Impotents, and for Orphans, out of hope to make profit by their Labours: must punish the Lazy by Labour, and not by crippling them: I say, all these particulars, said to be the subtile excogitations of the *Hollanders*, seem to me, but what could not almost have been otherwise.

Liberty of Conscience, Registry of Conveyances, small Customs, Banks, Lumbards, and Law Merchant, rise all from the same Spring, and tend to the same Sea; as for lowness of Interest, it is also a necessary effect of all the premisses, and not the Fruit of their contrivance.

Wherefore we shall only shew in particular the efficacy of each, and first of Liberty of Conscience; but before I enter upon these, I shall mention a Practice almost forgotten, (whether it referreth to Trade or Policy is not material,) which is, the *Hollanders* under-masting, and sailing such of their Shipping, as carry cheap and gross Goods, and whose Sale doth not depend much upon Season.

It is to be noted, that of two equal and like Vessels, if one spreads one thousand six hundred Yards of like Canvase, and the other two thousand five hundred, their speed is but as four to five, so as one brings home the same Timber in four days, as the other will in five. Now if we consider that although those Ships be but four or five days under Sail, that they are perhaps
thirty

Under-
masting
of Ships.

thirty upon the Voyage; so as the one is but $\frac{1}{30}$ part longer upon the whole Voyage than the other, though one fifth longer under Sail. Now if Masts, Yards, Rigging, Cables, and Anchors, do all depend upon the quantity and extent of the Sails, and consequently hands also; it follows that the one Vessel, goes at one third less charge, losing but one thirtieth of the time, and of what depends thereupon.

I now come to the first Policy of the *Dutch*, viz. Liberty of Conscience; which I conceive they grant upon these grounds. (But keeping up always a Force to maintain the Common Peace,) 1. They themselves broke with *Spain*, to avoid the imposition of the Clergy. 2. Dissenters of this kind, are for the most part, thinking, sober, and patient Men, and such as believe that Labour and Industry is their Duty towards God. (How erroneous soever their Opinions be.) 3. These People believing the Justice of God, and seeing the most Licentious persons, to enjoy most of the World, and its best things, will never venture to be of the same Religion, and Profession with Voluptuaries,

aries, and Men of extreme Wealth and Power, who they think have their Portion in this World.

4. They cannot but know, That no Man can believe what himself pleases, and to force Men to say they believe what they do not, is vain, absurd, and without Honor to God.

5. The *Hollanders* knowing themselves not to be an Infallible Church, and that others had the same Scripture for Guides as themselves, and withal the same Interest to save their Souls, did not think fit to make this matter their business; not more than to take Bonds of the Seamen they employ, not to cast away their own Ships and Lives.

6. The *Hollanders* observe that in *France* and *Spain*, (especially the latter) the Churchmen are about one hundred for one, to what they use or need; the principal care of whom is to preserve Uniformity, and this they take to be a superfluous charge.

7. They observe where most indeavours have been used to keep Uniformity, there Heterodoxy hath most abounded.

8. They believe that if $\frac{1}{4}$ of the People were Heterodox, and that if that

that whole quarter should by Miracle be removed, that within a small time $\frac{1}{4}$ of the remainder would again become Heterodox some way or other, it being natural for Men to differ in Opinion in matters above Sense and Reason: and for those who have less Wealth, to think they have the more Wit and Understanding, especially of the things of God, which they think chiefly belong to the Poor.

9. They think the case of the Primitive Christians, as it is represented in the *Acts of the Apostles*, looks like that of the present Dissenters, (I mean externally.) Moreover it is to be observed that Trade doth not (as some think) best flourish under Popular Governments, but rather that Trade is most vigorously carried on, in every State and Government, by the Heterodox part of the same, and such as profess Opinions different from what are publickly established: (that is to say) in *India* where the *Mahometan* Religion is Authorized, there the *Banians* are the most considerable Merchants. In the *Turkish* Empire the *Jews*, and Christians. At *Venice*, *Naples*, *Legorn*, *Genoua*, and *Lisbone*,
The Trade of any Country is chiefly managed by the Heterodox party.
Jews

Jews, and Non-Papist Merchant-Strangers: but to be short, in that part of *Europe*, where the *Roman* Catholick Religion, now hath, or lately hath had Establishment; there three quarters of the whole Trade, is in the hands of such as have separated from the Church (that is to say) the Inhabitants of *England*, *Scotland*, and *Ireland*, as also those of the *United Provinces*, with *Denmark*, *Sueden*, and *Norway*, together with the Subjects of the *German* Protestant Princes, and the *Hans* Towns, do at this day possess three quarters of the Trade of the World; and even in *France* it self, the *Hugonots* are proportionably far the greatest Traders; Nor is it to be denied but that in *Ireland*, where the said *Roman* Religion is not Authorized, there the Professors thereof have a great part of the Trade. From whence it follows that Trade is not fixt to any Species of Religion as such; but rather as before hath been said to the Hetrodox part of the whole, the truth whereof appears also in all the particular Towns of greatest Trade in *England*; nor do I find reason to believe, that the *Roman* Catholick Seamen in the whole World, are

All the
Papists
Seamen of
Europe
are scarce
sufficient
to Man
the King
of *Eng-*
lands
Fleet.

are sufficient to Man effectually a Fleet equal to what the King of *England* now hath; but the Non-papist Seamen, can do above thrice as much. Wherefore he whom this latter Party doth affectionately own to be their Head, cannot probably be wronged in his Sea-concernments by the other; from whence it follows, that for the advancement of Trade, (if that be a sufficient reason) Indulgence must be granted in matters of Opinion; though licentious actings as even in *Holland*, be restrained by force.

The second Policy or help to Trade used by the *Hollanders*, is securing the Titles to Lands and Houses; for although Lands and Houses may be called *Terra Firma* & *res immobilis*, yet the Title unto them is no more certain, than it pleases the Lawyers and Authority to make them; wherefore the *Hollanders* do by Registries, and other ways of Assurance make the Title as immovable as the Lands, for there can be no encouragement to Industry, where there is no assurance of what shall be gotten by it; and where by fraud and corruption, one Man may take away with ease and by a trick, and in a moment what

Firm Titles to
Lands and
Houses.

what another has gotten by many Years extreme labour and pains.

Of the introducing Registries into England.

There hath been much discourse, about introducing of Registries into *England*; the Lawyers for the most part object against it, alledging that Titles of Land in *England* are sufficiently secure already; wherefore omitting the considerations of small and oblique reasons *pro & contra*, it were good that enquiry were made from the Officers of several Courts, to what summ or value Purchasers have been damnified for this last ten Years, by such fraudulent conveyances as Registries would have prevented; the tenth part whereof at a *Medium*, is the annual loss which the People sustain for want of them, and then computation is to be made of the annual charge of Registering such extraordinary Conveyances, as would secure the Title of Lands; now by comparing these two summs, the Question so much agitated may be determined; though some think that though few are actually damnified, yet that all are hindered by fear and deterred from Dealing.

The Banks of Holland Their third Policy is their Bank, the use whereof is to encrease Mony, or rather to make

make a small summ equivalent in Trade to a greater, for the effecting whereof these things are to be considered. 1. How much Money will drive the Trade of the Nation. 2. How much current Money there is actually in the Nation. 3. How much Money will serve to make all payments of under 50 *l.* or any other more convenient summ throughout the Year. 4. For what summ the keepers of the Bank are unquestionable Security: If all these four particulars be well known, then it may also be known, how much of the ready Money above mentioned may safely and profitably be lodged in the Bank, and to how much ready current Money the said deposited Money is equivalent. As for example, suppose a Hund.thous. Pounds will drive the Trade of the Nation, & suppose there be but Sixty thousand Pounds of ready Money in the same; suppose also that Twenty thous. Pounds will drive on and answer all Payments made of under 50 *l.* In this case Forty of the Sixty being put into the Bank, will be equivalent to Eighty, which eighty and twenty kept out of the Bank do make up an Hundred, (that is to say) enough to drive the

the Trade as was proposed; where note that the Bank keepers must be responsible for double the sum entrusted with them, and must have power to levy upon the general, what they happen to loose unto particular Men.

Upon which grounds, the Bank may freely make use of the received Forty thousand Pounds, whereby the said sum, with the like sum in Credit makes Eighty thousand Pounds, and with the Twenty reserved an Hundred.

The *Hollanders* save
feldom
Husband-
men or
Foot Sol-
diers.

I might here add many more particulars, but being the same as have already been noted by others, I shall conclude only with adding one observation which I take to be of consequence, *viz.* That the *Hollanders* do rid their hands of two Trades, which are of greatest turmoil and danger, and yet of least profit; the first whereof is that of a common and private Soldier, for such they can hire from *England*, *Scotland*, and *Germany*, to venture their lives for Six pence a day, whilst themselves safely and quietly follow such Trades, whereby the meanest of them gain six times as much, and withal by this entertaining of Strangers for Soldiers; their Country

try becomes more and more peopled, forasmuch as the Children of such Strangers, are *Hollanders* and take to Trades, whilst new Strangers are admitted *ad infinitum*; besides these Soldiers at convenient intervals, do at least as much work as is equivalent to what they spend, and consequently by this way of employing of Strangers for Soldiers, they People the Country and save their own Persons from danger and misery, without any real expence, effecting by this method, what others have in vain attempted by Laws for Naturalizing of Strangers, as if Men could be charmed to transplant themselves from their own Native, into a Foreign Country merely by words, and for the bare leave of being called by a new Name. In *Ireland* Laws of Naturalization have had little effect, to bring in Aliens, and 'tis no wonder, since *English* Men will not go thither without they may have the pay of Soldiers, or some other advantage amounting to maintenance.

Having intimated the way by which the *Hollanders* do increase their People, I shall here digress to set down the way of computing the value of every Head

The Method of computing the value of Men and People.

one

one with another, and that by the instance of People in *England*, viz. Suppose the People of *England* be Six Millions in number, that their expence at 7 *l.* per Head be forty two Millions: suppose also that the Rent of the Lands be eight Millions, and the profit of all the Personal Estate be Eight Millions more; it must needs follow, that the Labour of the People must have supplied the remaining Twenty Six Millions, the which multiplied by Twenty (the Mass of Mankind being worth Twenty Years purchase as well as Land) makes Five Hundred and Twenty Millions, as the value of the whole People: which number divided by Six Millions, makes above 80 *l.* Sterling, to be valued of each Head of Man, Woman, and Child, and of adult Persons twice as much; from whence we may learn to compute the loss we have sustained by the Plague, by the Slaughter of Men in War, and by the sending them abroad into the Service of Foreign Princes. The other Trade of which the *Hollanders* have rid their Hands, is the old Patriarchal Trade of being Cow-keepers, and in a great Measure of that which concerns
Plough-

Ploughing and Sowing of Corn, having put that Employment upon the *Danes* and *Polanders*, from whom they have their Young Cattle and Corn. Now here we may take notice, that as Trades and curious Arts increase; so the Trade of Husbandry will decrease, or else the Wages of Husbandmen must rise, and consequently the Rents of Lands must fall.

For proof whereof I dare affirm; that if all the Husbandmen of *England*, who now earn but 8 *d.* a day or thereabouts, could become Tradesmen and earn 16 *d.* a day (which is no great Wages 2 *s.* and 2 *s.* 6 *d.* being usually given) that then it would be the advantage of *England* to throw up their Husbandry, and to make no use of their Lands, but for Grass Horses, Milch Cows, Gardens, and Orchards, &c. which if it be so, and if Trade and Manufacture have increased in *England* (that is to say) if a greater part of the People, apply themselves to those faculties, than there did heretofore, and if the price of Corn be no greater now, than when Husbandmen were more numerous, and Tradesmen fewer; It follows from that single

D

reason

Reasons
why Rents
do fall.

reason (though others may be added) that the Rents of Land must fall: As for example, suppose the price of Wheat be 5 s. or 60 pence the Bushel; now if the Rent of the Land whereon it grows, be the third Sheal; then of the 60 d. 20 d. is for the Land, and 40 d. for the Husbandman; But if the Husbandmans Wages, should rise one eighth part, or from 8 d. to 9 d. per Diem, then the Husbandmans share in the Bushel of Wheat, rises from 40 d. to 45 d. And consequently the Rent of the Land must fall from 20 d. to 15 d. for we suppose the price of the Wheat still remains the same: Especially since we cannot raise it, for if we did attempt it, Corn would be brought in to us, (as into *Holland*) from Foreign Parts; where the State of Husbandry was not changed.

And thus I have done with the first principal Conclusion, that, *A small Territory, and even a few People, may by Situation, Trade, and Policy, be made equivalent to a greater; and that convenience for Shipping, and Water-carriage, do most eminently and fundamentally conduce thereunto.*

Chap.

CHAP. II.

That some kind of Taxes and Publick Levies, may rather increase than diminish the Wealth of the Kingdom.

IF the Money or other Effects, levyed from the People by way of *Tax*, were destroyed and annihilated; then 'tis clear, that such *Levies* would diminish the Commonwealth: Or if the same were exported out of the Kingdom without any return at all, then the case would be also the same or worse: But if what is levyed as aforesaid, be only transferred from one hand to another, then we are only to consider whether the said Money or Commodities, are taken from an improving hand, and given to an ill Husband, or *vice versa*: As for example, suppose that Money by way of *Tax*, be taken from one who spendeth the same in superfluous eating and drinking; and delivered to another

What shifting of Money from hand is profitable or not.

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who