Agriculture is the foundation of every other art, business or profession, it is the chief attention of every wise Nation to see that this and Manufactures are proportionally encouraged but the preponderance ought to be in favour of the former.

Agriculture ought to flourish to the full cultivation of the land before Manufactures take place as articles of Trade and Commerce; and when cultivation is at its height, those Manufactures ought previously to be encouraged which employ materials of home growth, and last of all those of foreign Countries.

England is said to contain thirty four millions of Acres, many millions of these are waste or unimproved, some will object to the improving these wastes from the Sheep they maintain which provide wool that in manufacturing employ more hands than the cultivation would require, and from old people and Children being used in manufactures who would be useless in Agriculture. there is an appearance of solidity in these objections, yet a thousand Acres of the poorest arable land employ an infinite greater number of hands than a flock of Sheep does; and there are few Sheep Walks that have not under the surface a stratum

of

of marle, chalk or clay, which if spread on the surface become a lasting improvement when managed with knowledge and discretion; in several parts of the Kingdom this has so well answered that some land has advanced from one shilling rent to eight, nine, and ten, and this over a large extent of country.

The cost of this amelioration amounts to about £3. per acre, it will produce in middling seasons three quarters and a half of barley per acre; two, two and an half, and three quarters of rye; and turnips to the value of 36s. the mean amount of these three crops may be about £2.5s. the barley reckoned at 16s. the quarter, and the rye at 24s. deduct the expence and compare the profit and that of three years sheep feed besides by introducing these crops in regular courses, the ground will be well prepared for artificial grasses sown with the spring corn, and by means of clover and ray-grass nearly as many sheep may be kept on 300. acres cultivated in this method, as can be kept on 1000. when alone used for sheep; but if the method be followed which has been practised in some small tracts, the produce will be much greater and greater number of hands will be employed. this consists in letting the artificial grass (generally clover) remain but one year on the ground, adding to the other crops

carrots.

carrots, and so in six years reaping rye, barley, carrots, turnips, and clover; keeping no flock, only fatting cattle.

The second part of the objection to breaking up the sheep-walks, the employment of old people and children in the manufacture of wool falls to the ground; for if less sheep be kept, the increase of tillage must take part of the hands, and the trades depending upon it many; old people and children in a farm perfectly cultivated are employed in weeding, picking of seed corn, frighting vermin, planting pease and beans, slicing and dropping potatoe-setts, gathering potatoes.

It may not be improper to examine now the difference between a number of hands employed in manufacturing a foreign production, silk for instance, and the same number in breaking up and cultivating tracts of unimproved land; one millions worth of things vendible being productions from our earth, and raised by our own hands at home, will when exported bring more real gain than the sale of three millions worth of goods in manufactures of materials purchased abroad; the balance is therefore as three to one in favour of agriculture.

England from 1745. to 1750. shipped off in grain to the amount of £7,405,786. which is equivalent in national advantage to £22,000,000. raised by the

exportation

(4)

exportation of manufactured materials of foreign product

Agriculture is beyond all doubt the foundation of every other art, business and profession; and it has been the ideal policy of every wise and prudent people to encourage it to the utmost. I call it ideal policy, since it has not met with that care and attention its worth requires; the great political management in states where agriculture and manufactures are both encouraged, is to attend both but see the latter doth not preponderate.

To ask one question will be immediately entering on the subject; Is there any profession or business which ought to be advanced to the height it is capable of, before others are encouraged which draw off the working hands from the former? The answer is plain, agriculture that greatest of all manufactures, ought to flourish to the full cultivation of the land, before what we commonly call manufactures take place as articles of trade and commerce. And after cultivation is at its height, those manufactures ~~ought first to~~ be encouraged which work upon materials of our own growth; and last of all

those

those that employ foreign materials.

That our agriculture is not at that point of perfection to which it is capable of attaining is apparent by a transient view of the best cultivated Counties. England contains about thirty four millions of acres, I have little doubt but fifteen of them are waste or uncultivated, that is are unimproved Woods, Downs, and Commons. is it not therefore worthy of attention whether all the hands employed in manufactures to the amount of those necessary for cultivating those wastes, are not employed to the detriment of the state, provided they would otherwise be employed in the purposes of such cultivation.

As to the difference between land employed in the feeding of sheep or raising cultivated vegetables it is so important a point that I shall explain it as clearly as I am able.

There are very few sheep walks that have not under the surface a stratum of marle, chalk, or clay, and that such manures dug and spread on the surface become

a sure and lasting improvement when managed with knowledge and discretion, this method has been carried to great perfection in several parts of the Kingdom, I have known a great many of such attempts on various soils, and do not recollect one instance of any failure owing to an inferiority of profit in land after being improved; but a general advance in the value of its productions and the profit made by the cultivator. I know many instances of an advance of land from one shilling rent to eight, nine, and ten, and this not on a small farm or two, but over a large extent of country.

The general run of sheep walk land when marled or clayed with sadgemeal, which costs about three pounds an acre, will produce in middling seasons three quarters and a half of barley per acre, two, two and an half and three quarters of rye, and turneps to the value of about 30s. the mean amount of these three crops may be about 2£. 5s. the barley reckoned at 16s. the quarter, and rye at 24s. deduct the expences

on

on them, and let any intelligent person make the comparison between the profit and that of three years sheep feed; it will be found to bear none. But then comes the manifest superiority; by introducing these crops in regular courses of husbandry, they excellently well prepare the ground for artificial grasses sown with the spring corn, or without running after burnet or other newly discovered plants, I may assert that a judicious farmer by means of clover and ray grass will maintain nearly as many sheep on three hundred acres thus managed, as before require a thousand.

Though this seems conclusive, yet there are other points to be considered, for besides the superiority of the produce when thus improved in grain we are to consider that this will employ more hands.

There stated the improvements as commonly managed, but the practice of some small tracts of country is am persuaded of more private and public advantage in yielding a greater produce and employing more husbandry hands. It consists in letting the clover only remain one year on the ground, adding to the other crops carrots, and so in five years reaping rye, barley, carrots,

turnips

turneps and clover; keeping no flock, only fatting cattle.

I am satisfied this is much under the truth, for half the County of Norfolk was within the memory of man nothing but a sheep feed; which now is covered with as fine barley and rye as can be seen besides great quantities of Wheat.

The wealth of a Nation arises not only from the Number of the People, but from their Employment; therefore an enquiry into the employments most beneficial to the public good is of infinite consequence.

All Professions must either absolutely or relatively depend on each other, and some are of general importance, as in a great measure the foundation of all the rest.

Agriculture is beyond all doubt the foundation of every other art, business, or profession, and as such every wise nation has encouraged it to the utmost. This ought to flourish to the full cultivation of the land, before Manufactures take place as articles of Trade and Commerce, and those Manufactures ought to have the preference which work upon materials of our own growth, and last of all those which employ foreign materials.

As Agriculture is the foundation which supports Manufactures, it ought to be examined whether it is at present arrived at that state of perfection which it is capable of; the answer is too obvious. of 34.000.000. of Acres said to be in England, many millions are waste and unimproved.

Some persons think, that as the greatest part of the wastes maintain Sheep, and consequently numbers of people in manufacturing the Wool, that they are of more utility to the Public than if they were turned into Arable Land; but it is certain that 1.000. Acres of

of the poorest arable land ever employ a much greater number of hands than a flock of Sheep does.

Besides there are but few Sheep Walks that have not under the surface a stratum of Marle, Chalk, or Clay, and that such manures dug and spread on the surface with knowledge, and discretion become a sure and lasting improvement there are many instances of land from this management advancing in rent from one to eight, ~~shillings~~ ten shillings; this improvement at an average costs about three pounds per Acre, and will produce in middling seasons three quarters and a half of barley per Acre; two, two and a half and three quarters of rye: and turneps to the value of about thirty Shillings, the mean amount of these three crops may be about two pounds five Shillings: the Barley reckoned at sixteen shillings the quarter, and the Rye at twenty four, deduct the expences, and the profit will be greater than that of three years Sheep feed. But then comes the manifest superiority for these Crops in regular courses of husbandry prepare the ground for artificial grasses sown with the spring Corn, and with Clover and Ray grass a judicious farmer may maintain nearly as many Sheep on 300. Acres, laid down in course for three years, as before were kept on 1,000.

We are also to consider that a part

part of this land is kept constantly in Tillage, and employs more hands than attending the original number of Sheep and manufacturing their Wool.

These are the improvements commonly practised; but some particular farmers have carried their profits farther, by letting the artificial grass (generally clover) remain only one year in the ground; adding to the other crops, Carrots; thus in five years reaping Rye, Barley, Carrots, turneps, and Clover; keeping no Stock, only fattening Cattle.

To destroy another objection to breaking up Sheep Walks, the employment of Old people and Children in the manufacture of Wool; it may not be amiss to reflect on the different Employments Old people and Children meet with in a farm perfectly cultivated; Weeding, picking of Seed-Corn, frightning Vermin, planting Pease and Beans, slicing and dropping Potatoe-Sets, gathering Potatoes, besides a variety of other business will in a large farm well cultivated, yield much more employment, than one managed in the slovenly way too often seen.

Let us next consider a number of Men employed in manufacturing a foreign production, Silk, for instance, and the same hands employed in cultivating unimproved land; And whether 1.000. Men employed in manufacturing a

foreign

foreign Commodity are of equal value to the State, as the same number employed in the Arts of Agriculture, but it must be remembered that ~~one million~~ worth of things Vendible, being the produce of this Isle, and raised by its Inhabitants will when exported bring more real gain to the Nation, than the sales of ~~Three Millions~~ worth of goods in Manufactures, provided the materials manufactured are purchased from abroad; by which it appears that there is a ballance of three to one in favour of the productions, raised by the hands in question, upon our uncultivated lands, superior to the Manufactures they work upon, in the Value to the State.

That this superiority is real does not admit of a doubt, if we consider the difference in stability of a Commerce founded on the necessities or superfluities of life.

England from 1745. to 1750. exported grain to the amount of £ 7.405.746. which is equivalent in national advantage to 22.000.000. raised by Manufactures exported, when the materials are foreign,

The Exportation of Corn first received a bounty in 1689. to shew what effect it has had on the prices of grain, the following table is inserted, which proves the mean price of Wheat at Windsor Market at several periods, for 169. years.

	years	£ s d.	years	£. s. d.
From 1594. to 1612.	19.	2: 2: 5¼	69.	2: 8: 5¼.
1613. to 1637.	25.	2: 7: 4		
1638. to 1662.	25.	2: 15: 8		
1663. to 1687.	25.	2: 5: 3½.	25.	2: 5: 3½.
1688. to 1712.	25.	2: 8: 5½.	75.	2: 2: 5¼.
1713. to 1737.	25.	2: 0: 7½.		
1738. to 1762.	25.	1: 18: 2¾.		

By this it is clear that Wheat has been cheaper the last 75. years, since the bounty commenced, than it was for 94. years before, and that for the first 69. years the price of wheat continually rose, and that since the bounty it has continually sunk, which seems to prove that this sinking is owing to the bounty, but this does not shew the real sinking of Wheat, for the price of all other Articles is advanced a fourth part within these hundred Years, owing to the vast extension of Commerce which has rendered money more plenty, and more probably to the immense encrease of paper Currency.

As the Exportation has been of this great advantage to the State, we will now examine into the immediate profit arising from the sale of Corn

Corn exported from 1697. to 1706. 9. years.

Grain	Quarters	B.	Value
Barley	251.689.	7.	£ 207.644: 2: 11.
Malt	623.345.	4.	374.007: 6: 0.
Oatmeal	2.015.	4.	2.494: 3: 7.
Rye	288.985.	7.	288.777: 0: 3.
Wheat	532.867.	2	1.002.071: 17: 9.
	1.698.904.	0	£ 1.874.994: 10: 6

From 1706. to 1726. 20. years

Grain	Quarters	B	Value
Barley	433.237.	2	404.354.. 15.. 4.
Malt	4.381.205.		2.624.723.. 0.. 0.
Oat Meal	11.922.		16.690.. 19.. 6.
Rye	780.618.	6	938.092.. 2.. 2.
Wheat	2.518.213.	4	4.448.843.. 17.. 0.
	8.134.196.	5.	£8.429.704.. 14.. 0.

From 1726. to 1746. 20. Years

Grain	Quarters	B.	Value
Barley	590.080.	6.	523.696.. 13.. 3.
Malt	3.871.332.	4.	2.322.793.. 10.. 0.
Oat Meal	45.932.	3.	61.051.. 15.. 4.
Rye	520.020.	6.	517.853.. 19.. 11.
Wheat.	4.461.337.	4.	6.654.828.. 8.. 9
	9.488.703.	7.	£10.080.224.. 7.. 3

From 1746. to 1765. 19. Years

Grain	Quarters	B.	
Barley	1.268.048.	1.	1.357.130.. 8.. 3.
Malt	4.777.303.	6.	2.866.382.. 5.. 0.
Oatmeal	67.186	4.	91.821.. 11.. 0.
Rye	939.580.	7.	990.474.. 16.. 11.
Wheat	6.800.917.	1.	10.766.693.. 15.. 7.
	13.852.176.	3	£15.872.502.. 16.. 9.

Totals

Years	Quarters	B	Value
9	1.698.904.		1.874.994.. 10.. 6.
20.	8.134.196.	5.	8.429.704.. 14.. 0.
20.	9.488.703.	7.	10.080.224.. 7.. 3.
19.	13.852.176.	3	15.872.502.. 16.. 9.
68	33.143.980.	7.	£36.257.426.. 8.. 6

These thirty three Millions of quarters must have employed many hands in raising them, many Sailors in carrying them abroad, the freight of which amounted to above three Millions, consequently this one branch of Exports brought in forty millions Sterling

To shew the proportion of the Export to the Growth, shall be added a table of both

Grain	Growth	Export
Wheat and Rye	9.198.585.	247.362.
Barley	11.595.792.	171.253.
Oats	10.245.690.	3.737.
	31.040.067.	422.352.

Which shews that the Export is but a seventy third of the Growth.

About 3.66.195. Acres of Wheat and Rye are annually sowed, the export amounts consequently to about two pecks per Acre, therefore a light Crop not the Exportation is the cause of high price of Corn.

Since the establishment of the bounty on Wheat it has on an average been 9/. 3d. Cheaper per Quarter than before.

Z.

The universal benefit arising from Inclosures is so clear, that among unprejudiced persons it admits no longer of any doubt; in particular this measure greatly multiplies the productions of the Earth, and employment of the poor; some persons indeed still urge the advantages of a poor Man keeping a Cow, but they forget that the neighbouring farmers have the right of Commonage equally with the Cottagers, and by their flocks starve every animal the poor can keep.

The different circumstances attending large and small Farms deserve the most serious attention.

Farms vary in the produce according to the proportion between the substance of the farmer, and the quantity of the Land he occupies.

In considering whether a great farmer cultivates his land in a more perfect manner than a little one, a distinction must be made between Rich and Poor Soil.

In the latter case no improvement can be made without a flock of Sheep large enough for a fold, now such a flock requires a capital that no little farmer can furnish; besides the course of husbandry in these light soils consist mostly of turnips & ray-grass with clover; these crops require more cattle to consume them than the flocks, which generally are either a dairy of Cows or a flock

stock of other horned Cattle. folding goes on very slowly with less than 400. Sheep, these will cost about 10s. each that is £200; the manuring light land with marle or clay amounts to about £3. the here which a small farmer cannot afford.

Farms may be divided into such as employ one plough, such as employ two, large farms, very large ones, and grazing farms; ~~by one plough is meant one Man and two Horses and a Boy~~

The generality of little Farms cultivated with one plough, that is one Man, two Horses and a Boy, one Cart is kept which with the addition of Ladders carries the Corn, Hay &c. the Cows if any are of a poor and stinted kind; these are occupied by Labourers, Servants or others who have money sufficient to get this little Stock; the keeping but two Horses, prevents the purchasing manures; so that the Crops are scarcely ever equal to those of their more substantial Neighbours.

Farms cultivated with two ploughs and four horses, if composed of a sufficient quantity of grass land and that the stock in general equals the number of Horses the business of ploughing and harrowing may be fully performed which with manures the four Horses will collect may ensure much greater Crops than one a smaller farm.

By large farms we mean those that are tilled by six to twelve horses, it requires substance to conduct them in a proper manner, they can take advantage of all occasional and accidental Manures, drain all their wet lands, keep their fences in thorough repair, plough and harrow their lands fully, and are able to purchase a sufficient Stock of Cattle for consuming all ~~fodder~~ turnips &c. on the premises, and are never induced to pasture the fallow Crop from inability of purchasing the Stock necessary to eat it off.

~~The second class of farms~~

Excessive farms are those cultivated with from twelve to twenty, nay fifty, and an hundred horses.

In rich soils, or in such as let for 7s. an Acre, the farmer who keeps from six to twelve horses may cultivate his land as well, with as much profit to himself and the public, as the occupier of a larger track, and much better than those who cultivate excessive farms, because the farmer has then more gain and business so than he can properly oversee.

Farms cultivated with one plough are generally managed by the farmer alone, if more help is required it does not exceed one Labourer, and that for hoeing out the Corn, if not the lowest quality two horses can cultivate a lad is sometimes hired by the year, then no labourer is ever employed.

Of the second class of farms unless the farmer

farmer is a remarkable hard working Man, or has grown sons, a servant is kept to look after the Horses, and plough with a pair of them; a labourer is also hired to plough with the other pair, and frequently a Boy to attend the cattle, harrow, and perform other slight works of the farm; and at harvest or the beginning of thrashing another labourer is hired.

Those farms that require from Six to twelve Horses vary greatly in the number of hands they employ; for many farmers in this Class are able to perfect improvements of different kinds, above the means of those in the former Classes, which encreases the number of hands required

Those which have been titled excessive from the Occupier not being able to oversee it properly, one would imagine cannot be so advantageous as the former.

The following tables are formed from the number of hands and horses employed by 24. farmers of the 1st 2d and 3d Classes.

Class. I.

No.	Acres	Hands	Horses
1.	17.	1.	2
2	13.	1.	2.
3	16.	1.	2
4	17.	1.	2.
5	26.	1.	2.
6	26.	1.	3.
7	22.	1.	2.
8	30.	2	3
	167.	9.	19

Class. II.

No.	Acres	Hands	Horses
1.	55	3.	5
2.	43.	3.	4
3	50.	3.	5
4.	80.	4.	6.
5.	50.	3.	5.
6.	56	3.	4
7.	56	3.	5.
8	55	3.	5
	44 5.	25	38.

Class. III.

No.	Acres	Hands	Horses
1.	110	8.	8
2.	150	9.	8
3.	97	5.	6
4.	84	4.	6
5.	160	9.	10
6.	240	17.	12.
7.	200	10.	8
8.	100	8.	8
	1145	70	66.

notes on reading the Farmer's Letters
Letter III.

The universal benefit resulting from inclosures admits no longer of any doubt amongst sensible and unprejudiced people; they consist in the great increase of the earth's products, and the employment of the poor, and consequently their number; some yet urge the advantages of a poor man keeping a Cow, but forget that the neighbouring farmers have a right of Commonage as well as the Cottager, and by their flocks starve every animal the poor people can think of keeping.

The complaints are so universal against the engrossing farms that it deserves a cool and dispassionate enquiry;

In the first Class there is one Man to every 18. Acres, and one horse to every 9. Acres.

In the Second one Man to 17. Acres and one horse to 11½. Acres.

In the third one Man to 15. Acres and one horse to 17. Acres.

The extraordinary hands employed in the last Class at certain times of the year are much more considerable than in the second, and in the second than in the first.

A farmer who rents £30. or £40. a year, fares harder and is in effect poorer than a day labourer.

The second Class is very valuable to the State, those who compose it being removed from the drudgery of the business are able to employ some of those ~~[illegible]~~ Men to the State, the day labourers.

The third Class is still more useful to the public, for as two Men or one and a Boy are sufficient to look after 10. or 12. Horses, the Chief work lies on the labourers, servants are generally single, but labourers Married Men.

The fourth Class employ commonly hired servants, and few labourers as Cottages in those parts are scarce which is detrimental to population.

If it be questioned whether it is more advantageous to a Landlord, to portion out his Estate into small, middling, or large farms in the portions stated in the above Classes.

As to the first Class, the largeness of the Rent is in its favour, but the repairs of buildings are against it and in Countries where the generality of land is middling and large

In the first Class there is one person to every 18. Acres, in the second one to 17. in the third one to 15. and the extraordinary hands employed at certain times of the year are much more proportionally considerable with the 3d. than the 2d. and with the 2d. than with the 1st.

A little farmer that rents £30 or £40. a year fares harder and is in effect poorer than a day labourer.

The second Class are very valuable to the State, they being removed from the very drudgery of their business are able to pay and maintain some of those Valuable Men to the State the Day labourers

The third Class are still more useful to the State for two Men ~~active~~ and a Boy are sufficient to look after 10. or 12. Horses, then the Chief work lies on the labourers, the servants are generally single, but the labourers married Men.

The fourth Class commonly hired servants are employed and few labourers as cottagers in these parts are commonly very scarce, which is greatly prejudicial to population.

It may not be improper to examine whether it is more advantageous to a Landlord to portion out his estate into small, middling or large farms in the portions stated in the above classes.

As to the first Class, the largeness of the rent is in their favour, but the repairs of buildings against it, and in Countries where the generality of Land in middling and large farms lets at from 12s. to 14s. an Acre these little farms carry usually 20s. 21s. and more an Acre, if the buildings are not numerous than these require they unquestionably are the most profitable.

The

The second Class generally have many Tenants able to take farms of that size therefore generally more an acre is paid than for those of a larger size, the same remark holds good as on the first Class that if the buildings on them are judicious, they are more profitable than larger ones.

The third and fourth Classes do not so easily find occupiers: but if the land is poor, those who have substance enough to rent it, are better able to improve it, and in such cases those two Classes have the advantage.

A table of the horses kept by the 24. farmers that have been mentioned above may not be improper to be added here.

Class I.			Class II.		
Farmers	Acres	Horses	Farmers	Acres	Horses
No. 1.	17.	2.	No. 1.	55.	5.
2.	13.	2.	2.	43.	4.
3.	16	2.	3.	50.	5.
4	17	2.	4.	40.	5.
5.	26.	2.	5.	50.	5.
6.	26.	3.	6.	56.	4.
7.	22.	2.	7.	56.	5.
8.	30.	3.	8.	55.	5.
	167.	18.		445	38.

Class III	
No. 1.	110	8
2.	150	8
3.	97.	6
4.	48	6
5.	160	10
6.	240.	12
7.	200	8
8.	100.	8
	1145	66

Consequently of the
1st Class — 9. Acres to each horse
2d. Class. 11½. Acres to each horse
3d. Class 17. Acres to each horse.

In the first Class there is one Man to every 18. Acres, and one horse to 9. Acres.

In the second one Man to 17. Acres and one horse to 11½. Acres.

In the third one Man to 15. Acres and one horse to 17. Acres. and the extraordinary hands employed at certain times of the year are much more proportionally considerable with the third Class than the second, and with the second than with the first.

A farmer that rents £30. or £40. a year fares harder and is in effect poorer than a day labourer.

Those of the second Class are very valuable to the State, being removed from the drudgery of the business, are able to pay those useful Men, the day labourers.

Those of the third Class are still more advantageous to the State, for two Men, or one and a boy are sufficient to look after 10. or 12. horses; which throws the Chief work on labourers. Servants are generally single, but labourers married Men.

The fourth Class employ hired servants and few labourers, as Cottages in these parts are commonly very scarce, which prejudices population.

If it be questioned which is most to the advantage of a Landlord the portioning out his Estate into small, middling or large farms in the proportions stated in the above Classes; on examination it will appear that the first Class give most Rent but the repairs of buildings are against it, if indeed these are as sparing and cheap as the farm requires it will still be the most profitable.

The second Class is within the compass of many tenants, therefore more an acre is paid for farms of that size than for larger ones, and if the buildings on them are judicious they are more profitable than larger ones.

The third and fourth Classes do not so easily find Occupiers, but if the land is poor, those who have substance enough to rent them, are better able to improve them, and in such cases these two Classes have the advantage.