

**Manuscript Notes on the Design of a Canal between Hull and Liverpool;
plus Enclosed Agreement between Erasmus Darwin and William Rowley**

Publication/Creation

c.1760

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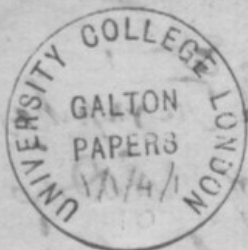


In this Copy, every Thing relating to
of Subject, &c. of Author could collect,
is introduced; & of greatest part of
it wrote but once over, with Design
after ^{choice of v.} materials ~~were~~ ^{was} determin'd,
~~at~~, of Language might have been
corrected, & brought down to any
Done, of might be thought best. —

The Lichfield Edition

Handwriting of
Dr. Erasmus Darwin
On Canals





amongst of advantages of J. present
canal, no injury to J. Mills on J. River,
less expense in making of canal than J. River

& J. Locks.
If we consider J. ~~the~~ number of Horses in mercantile
view, we do not mean of number used in
necessary to carry on our Home-Business, but of no
it can be spared, hence considering Horses
as an object of commerce, J. Husbandman
can rear as many, & rest with more, & it
in this light he is advantaged. (American Iron &c)

Memor. to quote Mr. Franklin
& Phil. Breese.

filev

The new navigation being free to all,
& Tolls at $\frac{1}{2}$ Locks being ~~less~~ ^{greater} than Turnpikes
on $\frac{1}{2}$ common Roads, $\frac{1}{2}$ Expense of building
a Boat being little more than half $\frac{1}{2}$ of
a broad wheeled Wagon, its Burthen
being four Times as much, & being
drawn on $\frac{1}{2}$ Trot by one Horse, are
Circumstances of great Benefit to $\frac{1}{2}$.
Farm, $\frac{1}{2}$ be contiguous to $\frac{1}{2}$ new Canal.

A Plan
of a navigable Canal
intended for a communication between
the Ports of Hull & Liverpool.

with some general Remarks on
inland Navigations.



Lo! Princes I behold contriving still,
And still conducting firm some brave Design!
See long Canals, & deepening Rivers join
Each part with each, & with y^e circling Main
The whole enliven'd Isle! — Thompson.

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particular Advantages of of. designed Canal.

To the Queen.

From your Majesty's known Attachment to
 y^e. Arts of Peace, & y^e. general Welfare
 of these your Kingdoms, we humbly beg
 leave to lay this Plan of ^{inland} Navigation at
 your Majesty's Feet, & intreat your royal
 Permission to call y^e. new Canal, "The River
 Charlotte", y^t. our latest Progeny may
 know y^e. Source of their Prosperity, &
 to y^e. End of Time repeat y^e. Name of their
 illustrious Patrons.

Long may You live to grace these Realm
 of Freedom, to smile Protection on ~~all~~ the
 works of Peace, & make y^e. People
 prosperous, as you have made their
 King happy!

p4r J

part of first

Account of W. designed Canal

The advantages accruing from inland Navigations to W. Production & Improvement of Commerce are extoll'd by every Writer, who has treated on W. commercial Interests of Nations: And many of our own Country have justly lamented, yt. in this respect we are outdone by France, our Rival in Trade & Manufactories, tho' W. Situation of our Lands & Harbours is much more commodious than theirs for

this purpose: as no part of *W*. Kingdom
by *W*. Computation of *S^r* Halley is more
than seventy miles distant from *W*. Shore.

Many Situations have been chalked out
by these Writers very eligible & practicable
for navigable Canals; but those whose
great Benefit to *W*. Nation in general,
appears most striking, are a Junction of
W. Thames & Severn, of *W*. Severn & Trent,
of *W*. Trent & Weaver: & lastly of the
Frith of Forth & *W*. Clyde. By which
W. ²principle Ports of our Island, would
communicate with each other; & *W*. most
fertile parts of *W*. Country with *W*. Metro=
=polis.

The practicability of navigable Canals
for this purpose has long been known,
in other countries experienced; but
this Nation is in ^a particular manner
indebted to W. Duke of Bridgewater, for
prodigious Improvements in W. Construction
& Management of these Canals, &
for ascertaining W. Expence of completing
them: whose name will on these Accounts
be dear, as long as Britain remains
Kingdom, to our latest Posterity.

The present Design comprehends only
a part of W. Great one above recited,
viz, to join by a Canal W. River Trent
about Widen in Derbyshire, & W. Duke of

Bridgewater's navigation in Cheshire, with
 Branches to Birmingham, Lichfield, ^{Jamworth} & Newcastle
 & W. River-Weaver. And if this work
 meets with W. approbation of W. Country, &
 W. Encouragement of W. Legislature; there
 seems no doubt but W. other parts of W.
 Design will soon be undertaken, to W. great
 Utility of W. landed Interest, & W. Trade
 of those Counties: & W. in a few years
 Petitions to Parliament for new Canals
 branching ~~into~~ ^{out of} these, will become as frequent
 as they are now for Turnpike Roads.

The purposed Canal is designed to fall
 into W. Trent at Wilder, rather than at Bur
 to avoid W. Shallows which greatly interrupt

W. course of that River; at Harecastle
 it will pass ~~for~~ above a mile underground,
 by which means fewer Locks will be
 necessary, & more water supply'd from
 W. Coal-mines in W. Country: & it
 terminates in W. Duke of Bridgewater's
 navigation to gain access to Manchester
 & Liverpool, without endangering W. vessels
 going into W. Mersey. The whole length
 of which will amount to miles, exclusive
 of W. Branches to Birmingham, Lichfield,
 Newcastle, & W. Weaver-navigation.

The Canal & vessels are to be constructed
 on W. Plan found most eligible from various
 experiments made by W. Duke of Bridgewater
 on his navigation. From W. experience of

which, his Engineer Mr Brindley will undertake to complete ⁵ this Canal, purchase of Land wanted, erect Locks, make towing paths, build Bridges, & defray every expence, except of obtaining of Act of Parliament, for seven hundred Pounds a Mile, — & will provide of Money if required.

He proposes to make of new Canal twelve feet wide at of bottom, & three feet deep in general, but at of Ferds only thirty Inches: & to supply ^{it} with a quantity of water, but just sufficient for of navigation, held up by Locks, having no stream, but dead as those in Holland. The Boats are to be seventy feet in length

It was said the money was ready
That the Expence would be [£] 700. a Mile
and this was said before his Majesty

it is now said, That it is supposed Harrold the
Cut will cost [£] 10,000 - & the remainder of the Canal
1000£. a Mile, And it don't appear that the money is ^{ready},

670 7

six feet wide, to draw thirty Inches of water, & to carry twenty Tons burthen.

They are to be so constructed as to sail with either end foremost by removing y^e. Rudder, & to cost about ³⁰~~twenty~~ Pounds each.

They are to be navigated by a Man & a Boy, & a Horse will draw one Vessel on a Trot ⁹either up or down y^e. Canal, but will draw three on occasion.

In respect to raising y^e. Money wanted to carry it into Execution, it is proposed to give five per Cent interest, & one per Cent risk, as was done by Parliament in y^e. Lankey Navigation. & y^e. y^e. whole shall be divided into Lots of 200 £ each, to be paid by installments in such Proportions,

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and at such Times as shall be ^a agreed upon,
& w^{ch}. Interest to commence from w^{ch}. Times
of each Payment, & to be paid half-yearly.

Hence as w^{ch}. Security is good beyond
a Doubt, & w^{ch}. Interest inviting, there
seems no Doubt of raising w^{ch}. whole by
a general Subscription: which perhaps
will be more agreeable to w^{ch}. Country, than
if it was w^{ch}. Property of a private Person.

References to n. Maps.

Quarterly if demanded



To cut through Hare-castle, it is
supposed will cost 10000[£].

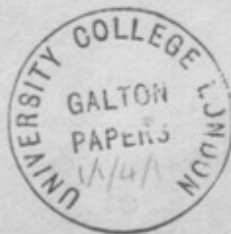
End of canal from thence to W. Trent
1000[£] a mile.

And 700[£] a mile from Harecastle
to W. Weaver.



Part. 1.

Part. 2?



The Power of Nations &c

Upon the number of their hardy & Industrious
Inhabitants & the abundance of their Wealth

The Word Weighed or Estimated
rather than the Word Ballanced

Part of second

General Advantages of inland Navigations.

In Designs of great Expence & Importance, of Advantages resulting from them to the Public in general, & to the peculiar Counties of give them Birth, should be first ascertain'd; & against these be ballenced the Injuries or Inconveniences, if such there be, affecting the Properties or Pleasures of Individuals.

It is a Maxim well establish'd amongst political Inquirers, that the Power of Nations, other circumstances being alike, is always in Proportion to the Number of their Inhabitants, & the Abundance of their Wealth.

Those Nations that remain still in their first State of Nature, & subsist alone by

Hunting, are of all others *of* most thinly
peopled, as *of* native Nations of America:
Pasturage by increasing *of* Sustenance of
Mankind increases their Numbers: Agriculture
for *of* same Reason still further contributes
to render a Country populous: & Lastly
Trade, by bartering Manufactures for Food,
of Labour of *of* Hand for *of* Fruit of *of*.
Earth, will to an inconceivable Degree
superadd Population to a well-cultivated Country.

But an Increase of Opulence as well as of
People attends an Increase of Trade, as
our own, & every other commercial Nation
evinces beyond *of* Power of Argument: &
of Result must be, *of* whatever facilitates
our Trade must ^{in some measure} increase it, & is in that
Degree of public Utility.

And tho every great Improvement in
Commerce may seem first to affect *of* Merchant

But an Increase of Opulence as well as of People depends
much upon the Extention of Manufactures in the
inland parts of ^a ~~the~~ Country and a cheap & ready
means of bringing the same to convenient Seaports
that they may become Articles of foreign Commerce &
~~thereby add National Wealth to~~ & thereby add national
Wealth.

& Mechanic; yet w. great Advantage is ultimately derived to w. Landed Gentleman; since it is ^{then} those w. consume or manufacture w. ~~natural~~ ~~artificial~~ Productions of his Soil, & have in many instances above tenfold enhanced its Value.

* It is on these Considerations w. w. national Effects of an advantageous or disadvantageous Commerce more deeply concerns w. Landed Gentleman, than w. Merchant himself: As w. Merchants whose Trade does not require their Labour, can remove with the best of their Effects, & try their Fortunes in a more advantageous Situation: but w. Landed Gentleman is bound down to w. Soil, & ^{to} can not remove his Estate, tho' the Persons are gone, ^{to} w. used to consume w. Produce of it.

* See Essay on Trade by Dr Tucker printed for T Tyre near Grays Inn Holbourn Price 2^{Sh.}

The convenience of Communication in general,
 & w. Facility of Carriage for w. natural Pro-
 -ductions of a Country to w. Sea, has generally
 found or forced a Passage for those Productions
 to foreign Markets: And w. Difference of
 Expence between Land-Carriage & w. by water
 is an Article so very important in every
 kind of Merchandice; w. Manufacture has
 frequently chose its Place of Residence for
 w. ~~the~~ sake of this one Convenience, &
 been able to undersell its Rivals, w.
 had before flourish'd further from w. Shore.

11. [The Aire & Calder-Navigation, ^{near Wakefield} in Yorkshire
 has within these few years afforded us an
 amazing Instance of w. Utility of navigable Canals
 both to w. Growth of establish'd Manufactories,
 & w. Procreation of new ones. The Tolls
 or River-Dues of this Navigation ^{are} ₁₀ private Property; & w. Proprietors by

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leasing them out ^{at first for} at 500[£] a year thought
they had concluded a beneficial Bargain.
When this Lease was expired they granted
them for another Term of Years for
1500[£] per Ann. The present Tenant gives
6000 Pounds a Year, & it is imagined
from W. Increase of Trade, w^t. 10,000[£]
will be offered at W. Expiration of his
Term |.



The Tonage on W. River Don-Navigation
supplies us with another Instance of this
kind, which in W. last four years ^{has} increased
in Value 2000 Pounds a Year.

¹² The astonishing Progress of W. Trade of
Liverpool further countenances W. Utility
of inland Navigations, which seem
principally, tho perhaps not totally to have
contributed to its advance. In W. Reign

of Queen Elizabeth a survey was taken of ^{the} shipping belonging to every Port of ^{the} Kingdom, when at Liverpool ^{the} largest vessel was but of forty Tons burthen, & ^{the} whole amount reached but 250 Tons: At present there are upwards of 400 vessels belonging to this Port, & each vessel on an average is supposed to carry ¹⁵⁰ ~~250~~ Tons. So ^{that} ^{the} Quantity of Shipping in ^{about} ¹³ a Century has increased as four hundred to one! — An amazing progress! —

But there is another Advantage to ^{the} Public peculiar to this Nation accruing from Water-Carriage: & ^{that} is, ^{that} more Horses may be spared to be employ'd in ^{the} Office

of Husbandry.

Mr Locke has observed $\frac{1}{10}$ nine parts in ten of $\frac{1}{10}$ Produce of till'd Lands are owing to the Labour of Men & Horses: hence an Addition to $\frac{1}{10}$ Number of Farm-Horses will considerably increase $\frac{1}{10}$ Fruits of $\frac{1}{10}$ Earth, and $\frac{1}{10}$ Quantity of Corn will be augmented, at $\frac{1}{10}$ same Time $\frac{1}{10}$ Exportation of it is facilitated.

The Kingdom of England alone, by a Computation of Dr Halley, contains about forty Millions of square Acres: & of these in $\frac{1}{10}$ Year 1689, when a Bounty was first given on $\frac{1}{10}$ Exportation of Grain, one third was supposed to lie in uncultivated Commons, There has not since $\frac{1}{10}$ Time a Year elapsed, but $\frac{1}{10}$ Parliament has passed fifteen or twenty private Acts for $\frac{1}{10}$ Inclosure of

those waste grounds, & has hence opened a Source of Employ for tenfold n. Number of Horses, n.t. can be spared from Carriage, to n. great Emolument of n. Proprietors, & of n. Community.

The Utility of n. Exportation of Corn to n. Public is not only, like other Merchandise, from n. Employment of our Hands at Home, & from n. Wealth for which it is exchanged abroad, but from its infallibly securing us from Famine in Seasons of uncommon Scarcity. Like n. Current, whose ^{superfluous} ~~redundant~~ waters pass unnoticed into distant Countries; but which in Times of Drought, n. prudent Farmer, damming up its accustomed Channel, derives over his own thirsty Meadows.

In n. Year 1751 an Extract from n. State of Exportation of Grain was laid before n.

House of Commons, & it appear'd y^t above
 five Millions of Quarters of Grain were
 exported from great Britain, ^{from} in y^e. Years
 1746 to 1750 ^{but} inclusive: & near seven Millions
 & a half of Money gained by y^e. Nation
 in Exchange. And since Grain has been made
 an Object of Commerce, its Price has not
 only in general been lower at Home,
 but its Cultivation has excreased to such
 a Degree, y^t a good Harvest is supposed
 to be a Provision for five Years. Here
 then is a Mine of Wealth diffused over
 y^e. Surface of our Island more valuable
 than those of Peru & Mexico! * a Mine
 y^t can not be worked to ~~best~~ its Perfection
 but by y^e. means of inland Navigation!

* See Remarks on Commerce by Dr John Nicholls
 printed for T Osbourn Grays Inn. 1754.

But those Farms ^{wt} lie contiguous to ^{the} new Canal will further receive great Advantage not only from enjoying a more extensive & a more certain Market for ^{the} Produce of their Lands in Grain, Roots, Cheese, Butter, Wool, Hides, Tallow, Malt, Beer, Cyder, Poultry &c but as they will procure their Coals, Lime, Marl, Timber, Utensils of Husbandry, & Materials for building by Water Carriage; & by ^{the} same means convey ^{the} Produce of their Farms to those many distant Markets fewer Horses will be required to carry on their Business of Agriculture, & ^{the} Provide they before consumed, will now sustain other Species of Cattle, beneficial both to ^{the} Husbandmen & ^{the} Community.

A Horse will annually require ^{the} Expence of Food, ^{wt} would support two Cows: & ^{the}

Produce of those will maintain three four or five People : hence an Increase of People is supported without any additional Expence to y^e. Public : & y^e. Price of Provisions lower'd without any Injury to y^e. Farmer.

Some indeed have objected, y^t y^e. Prices of Grain near y^e. new Canal will never arise so high, as it has sometimes done in Times of Scarcity ; from y^e. Ease of Importation. But in answer to this, it must follow, y^t from y^e. Ease of Exportation, their Prices will never sink so low in plentiful Seasons, & hence in this Circumstance y^e. Profits & y^e. Farmer on y^e. whole ^{will} be kept equal. We can not omit observing in this Place y^t this inequality of Gain is of all others y^e. most frequent Cause of y^e. Ruin of Farmers, in scarce Times when their Profits are great, they become more expensive & luxurious,

do not so well know how to contract their manner of Life, when cheaper seasons lower the value of their commodities.

Besides these general advantages to the Lands in Vicinity to the canal, those that contain Timber, Iron-Ore, Lime-Stone, Kudd Fuller's Earth, or other natural Productions of Value, to which may be added some ^{cultivated} ~~artificial~~ ones, ² are consumed at very distant Markets, as Madder, Wood, Liquorice, these I say will reap a Benefit from Water-Carriage, ² it can be brought under no Estimation.

{ This last Paragraph is designed to }
{ precede it immediately going before it }



The Damages sustain'd by some Farms ^{by} in being cut through will be very inconsiderable, as equitable allowances will be made in y^e. Purchase of y^e. Lands, & proper Bridges & Fords be provided to remedy such Inconveniences: Nor will y^e. Quantity of Land required be of great Consequence, as y^e. Designed Width of y^e. Canal is only twelve Feet at its Bottom, & it passes a great part of y^e. way through Tracts of un-cultivated Commons.

And y^e. advantages of a new Canal compared to a River-Navigation are in other Respects very many & important: The Shortness of y^e. Voyage, protracted in y^e. other by y^e. indented Course of Rivers: The Absence of Currents, which impede y^e. upward Navigation, more than they assist y^e. downward, & hourly abrade & undermine

w. Banks; The security from w. Mischief & Delay
 of Floods: The easier Draught for w. Horses,
 from w. Boat keeping nearer w. Towing Path;
 But there is one other very material cir-
 -cumstance in favour of Canal Navigation,
 which is, yt. w. Commissioners may chuse high
 grounds for w. Situation of the Locks, while
 in w. other they are solely ^{wholly} govern'd by w.
 accidental Shallows of w. River. In w.
 later Case, w. Locks are frequently erected
 on low Lands, & w. neighbouring Meadows
 thereby in some Measure render'd damp,
 & swampy: while in Canal Navigation,
 this Disadvantage is not only avoided, but
 as w. Canals, to pursue its most convenient
 course, will most frequently wind along w.
 Edges of w. rising Ground, numberless Wall-
 = Springs will be cut through, & w. Plains
 beneath become actually dryer & more fertile.

Besides these may be added some incidental circumstances beneficial to y. Proprietors of Land from making a new Canal: y. in some Places Materials of Value may be found, before unthought of, as white Clay, Pore, Fuller's Earth, Marl, Stone &c. & in other Places Spouts may be laid through y. Banks of y. Canal to flood y. neighbouring Meadows in Summers of unusual Draught; & in Times of unseasonable Floods there will universally be two Rivers, where there is now only one, to carry off y. Superabundancy of Water.

The landed Gentlemen on y. Calder Navigation ~~near Wakefield in Yorkshire~~ were by experience fully sensible of these many & great conveniences of a Canal passing through their Farms: For when a Cut was to be carried either on y. North or South

Side of that River; W. Land on W. North Side was valued at twenty five Pounds an acre, & on W. South side at fifty Pounds; & as one side was equally convenient with W. other, W. Commissioners determined from W. Price of W. Land to make it on W. North Side. And W. Landowners, ^{on W. South side} attended W. Meeting of Commissioners at Rochdale on W. eleventh of April last, & voluntarily offered their Land at twenty five Pounds an acre, half W. Price it was valued at; but W. Opportunity was lost, Preparations had been made for carrying it on W. other side; & W. Commissioners would not alter their Resolution.

¹⁴ When a Survey was made, a very few years ago, ~~before~~ for making a Canal to join W. Town of ^{W. River Severn,} & some Difficulties arising, W. Proprietors of

f. 19r 116

Land to encourage y. Undertaking, offer'd to
give them all y. Land they should cut or
cover for six or seven miles in Length,
all of it enclosed good Land, & much more
it is believed would have been given
had y. Design been carried into Execution.



We come now to y. Pleasures of those
y. border on y. new Canal, which perhaps
is more worth considering as Taste is so
universally propagated y. our Farms are
all gradually improving into Gardens,
& here it must be allowed, y. to have
a Lawn ~~with~~ terminated by water with
moving Objects passing & repassing upon it,
is a Finishing to a Scene of all others
y. most desirable, & which y. Landscape
Painter so often endeavours in vain to imitate.

And to these if we add y^e. Possession of a
Summer-House floating upon water, a
Gondola, y^t will convey them to many y^e.
most flourishing Towns, through y^e. most
delightful Valleys of y^e. Kingdom: & in
their Seasons to have variety of Fish
brought to them from great Distances alive
in Well-Boats for their Table: we have
Articles of Luxury, y^t other Situations
sigh for in vain!

Nor must we here omit y^t trite Objection
of y^e. Dishonesty of Water-Men, y^t they
are liable to pilfer Fruit & Poultry in
their Passage: But surely this kind of
Travellers are least fitted for such Depre-
-dations: as by their frequent returns they
will soon be as well known as y^e. Inhabitants
of y^e. Neighbourhood, & their Journeys are

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so slow y^t an Hour will overtake y^e Thief,
who must have so many Confederates, y^t
there never can be wanted Evidence to
discover & convict him.

at this Time of Day, when Britain
would seem to vie with antient Greece &
Rome in y^e Utility & Perfection of her
arts, & in y^e Number & Magnificence of
her public Works; y^e Elegance & Firmness
of our common Roads have long been
thought worthy y^e attention of y^e Legislature.
But Experience has shewn us, y^t neither
Statute Duty, nor Turnpikes, with broad
wheels, & ^{non} Limitations of y^e Number of
Horses can answer this desirable Purpose
without y^e Assistance of inland Navigations.
The Quantities of heavy Goods, which do most
Injury to y^e Roads, & contribute least to
their Repairs will by this means be
diminished, & y^e Expence of making & keeping

them compleat, so far reduced, y^t by degrees
they will rival those of France in Smoothness
& Stability, & in Time like those, ~~as to~~
lay no Tax upon y^e. Traveller.

Well informed of y^e. extensive Utility
of inland Navigation to y^e. Growth of Commerce
& y^e. Improvement of y^e. Value of a
Country, y^t. great Genius y^e. Czar Peter
compleated a Canal between Petersburgh
& y^e. Wolga at an incredible Expence
through an uncouth & arduous Country.
The States of Holland owe their very Existence
as well as their Opulence & Power to their
numerous Canals. And y^e. French Nation
our Rival in Arts & Arms have already
much avail'd themselves by navigable Cuts
of vast Extent, & of amazing Advantage to their

The States of Holland
much of
Owe their Opulence as well as
their Existence

Commerce. Of these are v. Canals of Orleans
 & Briare, between v. Countries water'd by
 v. Seine & v. Loire: but y^t of Languedoc
 is v. most stupendous Work, which M^r
 Riquet has carried through upwards of
 seventy Leagues of Country, & establish'd
 a commodious Communication from Marseilles
to Bourdeaux¹⁰, between v. Ocean & the
 Mediterranean.

There is lastly another Consideration
 well worthy v. attention of this Sea-girt
 Kingdom, y^t by v. Abundance of inland
 Navigations - a hardy Race of Water-Men
 will be produced, ready in Times of
 Emergency to recruit our naval Armaments,
 v. Bulwork, & v. Glory of our happy Island.

And when we recollect y^t y^e. amazing Successes
 of y^e. British arms in y^e. late War have
 made us sole Masters of an immense Continent
~~and y^e. the great Heavens! and y^e. the great Heavens!~~
~~to y^e. the great Heavens! and y^e. the great Heavens!~~
 what a **Prodigious** Trade must result to us
 from these growing Provinces, which for many
 Ages will most undoubtedly employ themselves
 in Agriculture, & be supply'd from us with
 all y^e. other Necessaries & Luxuries of Life.
 And when we recollect y^t y^e. World of
 Commerce, like y^e. World of Vegetation
 establishes it's firmest Roots, & spreads
 it's Branches widest near y^e. Brinks of
 Rivers, we should be inclined to wish this
 our Island all Shore; & as far as
 Nature has not forbid our Improvements,
 endeavour to make it so.

Law or

f. 22v

Britannia with W. Ornaments of Peace f. 23b
 pointing out to Trent ^{with her daughter} a Course up a Hill, which
 his waters carry up, & he stands amazed.
 He has an Anchor near him. round W. Shield
 auspice Georgio. III.



Amnis doctus iter melius, Hor.

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An Account of an intended
Canal from Wilton in Derbyshire
to Grodsham in Cheshire ^{joining the} with
some general Remarks on Inland
Navigation.

Lo. Princes I Lehold & c.

We reciprocally agree y^t y.
Posts & Rails in Burrow-copp belonging
to Dr Darwin shall be return'd when y.
Hedge is sufficiently grown; & y^e Posts
& Rails in Mordlin's Well, y^t belong
to Mr Rowley, shall be also return'd
when y. Hedge is sufficiently grown

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Erasmus Darwin
Willm Rowley



part. 2?

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part. 3.



Part the Third

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Advantages of the Designed Canal.

The Practicability of the Designed Canal was first in part ascertained by a Survey of Mr. Ives of Liverpool in the year 1757. & in 1758 by Mr. Brindley, Engineer to the Duke of Bridgewater, & in the year 1760 by Mr. Smeaton F.R.S. & Mr. Brindley conjointly. These three Gentlemen at the same Time they declared the Practicability of making this navigable Canal, gave it their Opinion that no Tract of Land in the Kingdom stood so much in need of an inland Navigation, or was naturally so well adapted for that Purpose, & for uniting the East & western Seas.

for Home-consumption and exportation
(of which in another place) but when
mix'd with foam or earth in —
certain quantitys, becomes a —
profitable manure. of this salt
from Lanton to Northwich is a
Rock above forty yards perpendicular
in thickness: the expence of ^{its} freight
along the Canal will be but —
Two Shillings a Ton for sixty
miles, ~~and it~~ and it may be
used duty free for the purposes
of agriculture.

These Salt Mines were first Discover'd in y. Year
1670 in boring for Coals in y. Liberties of William
Marbury of Marbury Esq^r & lie about 34 Yards
from y. Surface. Philosoph. Transact.

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a great Quantity of ~~this~~ Iron
~~stone~~ ^{Ore} will be brought down to Liv-
-erpool, ^{by N. new Canal,} & here reship'd for N.
North: from whence will be
return'd great Quantities of N.
red Iron Ore, to be convey'd
by this Canal to various Works
in this Country. —

Iron ore is another production of this country, and ^{some} ~~of~~ other parts in the neighbourhood of the canal, both for ^{the manufacture of} the cold shire and red shire iron.

There is a mountain, called Mon-cop, near Lawton, that contains four different and usefull kinds of stone. 1st mill stones of an excellent quality, which are now carried by land to upwards of a hundred miles distance, and to all the parts of the intended navigation: 2^d a ~~very~~ good lime-stone. ~~and~~ 3^d a fine free stone. ~~for building~~ ^{and} 4th ~~the~~ grinding stones of different sorts, in great repute

4 amongst the manufactories of —
Hard-ware

From Lawton to Stoke is a continued
Chain of Collieries, & increased
Consumption of these Coals by means of
the new Canal, it is computed will amount
to near forty thousand Tons annually.

at a Place call Brick-Kilns in
Staffordshire Fuller's Earth is dug up,
which will, ^{not only} greatly convenience the Ma-
-nufactories of Manchester, ^{Warrington} but may be
carried up the Calder to Leeds &
~~wholesale~~ the neighbouring Cloth-Works
in Yorkshire.

Near Wolsely Bridge, ^{also} a Mile below
Burton a Free-Stone is found on the very
Banks of the River, excellent for its

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5

Stability & Colour; some Parts of which
seem not inferior to that of Portland,
or Roche Abbey.

A mile from Riddgely, a blazing kind
of Coal is procured, call'd Canal Coal,
& other common Coals, &c. Property of &c.
Earl of Newbridge. Of this Coal &c. lower
stratum is said to be a valuable one,
& it is apprehended a navigable Trough
might be carried from &c. new Canal into
&c. Bowels of &c. Coal-Mines, in &c.
Manner of &c. Duke of Bridgewater's
Colliery in Lancashire, and &c. this
would both lay them dry, which is &c.
present Obstacle to working them, & at
&c. same Time convey them by Water into

of new Canal, to w. great Advantage both
of w. Country, & of w. noble Proprietor.

Near Wilton in Yorkshire arises an
immense Mountain of Limestone, (on which
is situated w. Village of Breiden,) ~~this~~
~~is a Commodity much wanted through w.~~
~~whole Country~~ ^{in w. neighbourhood} and at Tichel, ^{which} are other
large Lime Quarries; ~~this~~ is a
Commodity much wanted along w. whole
Course of w. Canal, ~~both~~ as well for
w. Purposes of Agriculture as of
Architecture.

A few Miles lower at Clay-Hill a
firm & elegant Plaster is found, proper
for w. Uses either of w. Chisel or Trowel.

Not many Miles from the navigable Trent,
by the side of the River Soar, which will
be made navigable when the Inhabitants of
Leicester awake, are the noted Quarries
of Swithland Slate, a most beautiful, &
durable covering for Houses: And prodigious
Rocks of the kind of grey Porphyry,
which has hitherto been procured from
Scotland, to pave ~~some~~ the Streets of
London & Westminster.

A great Quantity of Marl will be
thrown out in making the Canal, & will
besides in many Places be found so near
the Brink, as to be deliver'd from the
Shade into the Barge, which will in
other Places greatly advance the Improvement

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of Land. Other Manures will also be £314
procured from large Towns on reasonable
Terms for back Carriage. and as these
Manures are intended to pay no Tonnage,
these Advantages with y. Lime & Rock-
-Salt above-mention'd will double y.
Produce & y. Value of many of y. Farms
divided by y. new Navigation.

Not only these natural Productions, y.
have their Origin ~~from~~ ^{on} y. Banks of y. new
Canal, but those from y. more distant
parts of y. Counties, it passes through,
will experience an advantage from y. ~~late~~
greater Ease of Carriage both to y. ~~Produce~~
in respect to their Value, & y. Quantity
consumed. y. there are Lead, Copper, Calamy,

Marbles, Rotten-Stone, Ruddle, white Clay,
 Spar, &c. ~~which will hence~~
~~Articles of~~ ^{which will hence} become more profitable
 both to ^{their} Purchasers & Proprietors. ~~of~~
~~the~~ many other unmanufactured
 Articles will probably become useful to
 Society, which at present rest unmolested
 on their native Beds. ^{Calc & Kevill are metallic Stones}
^{found in y. Lead-Mines, as yet made}
^{no use of: their Properties unknown.}

Spar. In a Tract published in y. German
 Language on y. Manufactory of Dresden Porcelain,
 an Alccin Spar, got out of y. Lead-Mines is
 said to be used there, as y. Petunse is used in
 China, & prepared in y. same Manner, viz
 it is reduced to Powder without Calcination,
 (great Stress is laid on this Circumstance) &
 y. Powder wash'd & purify'd from y. grosser
 Parts which are pounded over again. The Spar is
 said to be of a faint Flesh-Colour, with a very
 pale Blush, & whiteish. Art de la Verrerie
 publie a Paris chez Durant & Pissot. 1752.)

Secondly. In respect to d. manufactured or
 cultivated Commodities of d. Countries in Vicinity
 to d. Canal, d. general Products of d.
 Farms, in Grain, Wool, Hides, Tallow,
 Bacon, Cheese &c. claim our first
 Consideration: many hundred Tons of
 this last Article are annually carried
 by Land above forty Miles to Willington
 in Derbyshire as d. most convenient
 navigable Outlet, & great Quantities
 of Grain, Malt, ~~betwixt~~^{meal}, & Bacon are
 convey'd by Land-Carriage from Derbyshire
 & d. eastern parts of Staffordshire, to
 d. large Towns of ^{Manchester} ~~Manchester~~ ^{Warrington} ~~Warrington~~ ^{Liverpool}
 d. Potteries, & Salt-Countries, where
 d. Number of Inhabitants so far exceeds
 d. Fertility of d. Soil.

There are other cultivated Productions of a Farm, y^t are now from their Bulk & Weight of necessity consumed on y^e. Premises or in y^e. Neighbourhood, as Oak Timber, of which there are many extensive Woods near y^e. intended Course of y^e. Navigation, Hay, straw, ^{Cord-Wood} Bark of y^e. Oak & Alder for ^{y^e. Use of} ~~tanning~~ y^e. Tanner & Dyer, to which may be added Wood, Madder, Liquorice, & other Articles y^t will then become Objects of Cultivation & of Commerce.

From y^e. Wicks in Cheshire, manufactured, Salt is carried on Horseback to almost every part of Staffordshire, Derbyshire, Leicestershire, Nottinghamshire,

~~Yorkshire~~ & Lincolnshire: to all which places it will gain a much cheaper access by means of the intended Navigation.*

The Salt-Manufacturers at Northwich produce annually about 50,000 Tons of white Salt, yet they do not supply our Fisheries at Newfoundland, being undersold both by W. French & Spaniards, whose Ships, as they can take in a Freight of Salt without going out of their Road from W. Mediterranean to Newfoundland,

* So great is W. Home-Consumption of this article, & from W. Salt-Works at Northwich only, a Duty of 67,000 Pounds was last year paid into W. Exchequer.



have an advantage over ours, which
are oblig'd to come to Liverpool for
y^t. Purpose: And not from any superior
excellency of their Salt for preserving
Fish. ^a (2^m)

To put themselves therefore upon an
equal footing with Foreigners, y^e. Manufac-
turers of Salt at Northwich apply'd to
y^e. Lords of Trade & Plantations to have
a small Duty paid on foreign Salt, or a
total prohibition of it at our Fisheries,
But their Lordships not willing to lay any
burthen on an infant Fishery rejected their Suit.

By addition of a certain Quantity of muriatic Acid,
when y^e. Evaporation is so far advanced, y^t. little saline
Crystals begin to appear on y^e. Surface of y^e. Brine, a strong
white Salt may be prepared from English Rock Salt, or
Brine, fit for curing Provisions in all different ways
& for all uses. Dr. Brownrigg's art of making common Salt.
printed by C Davis in Holbourn. 1746.

The Quantity of Coals consumed annually in W. Salt-Manufactory of Northwich amounts to 27,010 Tons; at nine Shillings a Ton. By W. new Canal Coals would be laid down at Northwich for six Shillings a Ton. This saving in W. Price of Coal would reduce W. Expense of W. Manufactory above thirty per Cent, which Reduction it is apprehended would have W. same salutary Effects, with W. Duty requested upon foreign Salt, without any of its pernicious Consequences.

This Circumstance in all probability would increase W. Salt Trade at Northwich above double, & consequently W. Tonage & Trade upon W. River ^{weaver} ~~Leek~~, & at W. Port of Liverpool in Proportion, besides W. additional Number of Hands employ'd

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in W. Salt-Business. This then is a national
Concern, & one of no inconsiderable consequence,
as we not only increase our Number of
Hands & our Trade at Home, but take
up Trade from our natural Enemies.

The new canal will remedy another
evil in W. Salt Trade respecting W. Port of
Liverpool: As when Floods have for many
Weeks interrupted W. Navigation of W. Weaver,
W. Price of Salt has risen 30, 50. or
Cent per Cent at W. Liverpool Market,
which tho' it may be a temporary Advantage
to some Individuals, who happen to have
a large Stock on Hand, it must nevertheless
be attended with very bad Effects upon W.
Trade in general.

Nor will W. Proprietors of W. Weaver
Navigation receive any considerable Injury

from W. new Canal, as their Freight depends almost entirely upon W. Salt & Salt-Rock from Winsford, & Northwich, which at present amounts to 74,000 Tons a Year. & will probably receive a very ~~considerable~~^{great} Increase as mentioned above: & none of this is likely to come upon W. new Canal, except when Floods, or W. Repairs of Locks obstruct W. Weaver, first because W. new Canal will be some Miles distant from Winsford, & tho' it will come near W. Works at Northwich, W. Disadvantage of unloading, & loading again, as W. ~~new~~-Canal-Vessels will not live in W. Tideway, will prevent it's coming there in W. common Course of Navigation.

The Villages of Burslem, Stoke, Henley
 Green, Lane-Delf, & Lane-End are employed
 in the Manufacture of various kinds of Stone
 & Earthen Ware. These Goods are ex-
 -ported from all our Sea-Ports to our
 several Colonies in America & the West-
 -Indies & to almost every part of Europe.
 Great Quantities of Flint-Stones are used
 in ~~making~~ the Potteries, which are brought
~~from~~ by Sea from different Parts of the Coast
 to Liverpool & Hull: and the Clay used
 in the white Ware is brought from Devonshire
 generally to ~~Hull~~ Liverpool. These
 Materials are brought from thence by Water
 up the Mersey & Weaver to Winsford in
 Cheshire: those from Hull up the Trent to
 Willington in Derbyshire, & from Winsford ~~to~~
 Willington the whole is brought to the Potteries

by Land-Carriage through Miles of Country

The Ware when finished is convey'd to
 Liverpool & Hull in the same manner, &c.
 Materials are brought from ~~thence~~ those
 places, & amount together at least to
 ten thousand Tons yearly. — The Barthern
 of so expensive a Land-Carriage, ^{the Winsford & Willington} & the uncertainty
 of the Navigation from ~~the River in Cheshire~~
~~from Willington~~ those places to Fiddham
 in Cheshire, & Wilden in Derbyshire,
 occasioned by the Floods, ~~and~~ in Winter,
 & the numerous Shallows in Summer, & these
 Delays & Expenses attending both their
 Materials & Manufactures, must inevitably
 in a few years ruin the Potteries of
 Staffordshire. But what will harrow
 on this Ruin with more hasty strides, is
 the other Potteries are already established,



stone

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The present Price of Carriage of Clay
 & Flint for y^e Potteries is 15/^s Ton
 on an average; which by y^e. new Canal
 will be reduced to 8/^s Ton on
 about 4000 Tons annually, & y^e. Carriage
 & Freight of y^e. earthen Ware in
 Return will be reduced from 28/^s
 to about 12 Shillings ^{per} Ton, which
 will greatly increase y^e. Expectation of
 y^e. Manufactory.

The Carriage of Flint from Hull
 to y^e. Pottery, amounts to ^{per} Ton,
 & will be reduced by y^e. new conveyance
 to about .
 and y^e. Carriage & Freight of y^e. manufactured Ware

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& begin to flourish in France, & in
America.

As these Potteries employ above six thousand
hands in w. manufactory, & above four
thousand more in w. other necessary Trades
dependant on them, here not only w.
political Interest of this Kingdom,
but Humanity herself steps forth, &
pleads w. cause of inland navigation

In w. Neighbourhood of Burslem &
w. Potteries a Brick & Tile are manufactured
of a blue Colour, & are so far vitrify'd
as to be more hard & durable than any
kind of stone used in building: this is
an article yt. is likely to find a Demand
throughout w. whole course of w. Canal.

The other Manufactories, yt. will be

greatly benifited by this Navigation are as numerous as those Manufactories, such are y^e. Hemp & Flax Businesses, of which there are many Branches, as of Thread, Tape, Sail-Cloths, &c. which will receive their unwrought Materials, & part with their wrought Commodities at much lower Rates, & in consequence enlarge their Manufactories, & extend their Commerce.

The Metellic Trades, will some of them receive greater Advantages, as their Materials are heavier, such are y^e. Consumers of Lead, Copper, ~~Zinc~~, Tin, Iron. & of their Calcinations, whether by nature or artificial Processes, as white Lead, Minium, ^{Litharge} Verdigrise, ^{Calamine}, Umbers & Bechers.

The Iron Manufactories in Warwickshire & Staffordshire have already too sensibly

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felt w. want of foreign Bar Iron,
insomuch w. w. price of Iron ~~for~~ in
these Counties has generally been
above five per ~~ct~~ Higher than in
Yorkshire, ^x & w. Commodity itself of less
Value. On this account alone it is w.
w. nailing Trade has for many years
gradually declined in these Counties,
& ~~is now~~ transported itself to some parts
of Yorkshire, where their inland Navigations
favour'd w. Carriage of their Materials.

^x Nail-Iron for eight years past has been
sold in general throughout Warwickshire &
Staffordshire at 19..10..0 pr Ton, by w. lengthened,
but has last year been lower'd to 18..10..0,
whereas in Yorkshire w. general price of Nail-
-Iron has been

~~One Reason~~ of The high Price of Iron
 in these Counties seems owing first to y.
 Manufactories of English Iron being confined
 to too few Hands, ^{the vast extent of y. article considered.} arising almost to
 a ~~Monopoly~~. & secondly to y. high Price
 of Freight from Hull, (y. most convenient
 Port for y. Importation of foreign Bar.)
 up y. River Trent to Burton, which
 Navigation has long been a Monopoly,
 to y. Destruction & Disgrace of y.
 trading County.

from Hull to Gainsborough is ^{2^{rs}} 2 p^r Ton

The Price of Freight of Bar Iron from
 Gainsborough to Burton is 13..4 p^r Ton
 by y. long Hundred; & from Bristol to Bewdley
 but six Shillings. The Vessels on both these
 Rivers are drawn by Men, when y. Wind is

not favourable, & w. Length of way is considerably greater on w. Severn. So what then can this Inequality of w. Price of Freight be owing? — ~~To an exclusive Monopoly!~~ — #

This Evil the proposed navigation will in part remedy, & as w. Legislature has lately given Bounties on w. Importation of American Iron, Timber, & Potash, w. new Canal seems to ensure a Sale for those Commodities through an extensive & populous Country.

a Reduction of w. Price of Freight to near half ~~the present~~ would greatly benefit w. Beer Trade of w. Town of Burton; w. has long struggled under this cruel Calamity.



Thirdly. The general Situation of N. new Canal is ^{not} only fortunate in opening a Communication for every kind of Traffic between N. Eastern & Western Coasts; but will increase N. Connection of N. populous Towns of Birmingham, Wolverhampton, Walsal, & every numerous Inhabitants of N. circumjacent Country, with N. Ports of Liverpool, ~~which~~ ^{their} ~~to~~ ^{discrep.} ~~the~~ ^{mutual} ~~advantage.~~ ~~of both~~ The Liverpool Merchants will be enabled to supply those Towns with Teals, Mahogany, Tobacco, Sugars, & Groceries of all kinds, Rum, Wine & many other sorts of Merchandise, & receive in Return their valuable Manufactures, such as Guns & other heavy articles at a saving of about three Pounds pr. Ton in N. Carriage. And will be enabled to procure English Oak for N. Purposes of Ship-Building.

The Manufactures of the large &
flourishing Towns of Leicester, Nottingham, Derby,
Coventry will find their way to Liverpool,
& many kinds of Merchandise be returned
to those Towns & Neighbourhood
more distant

Besides these many other Towns of Manufacture
& Trade will gain access to y. Port of Liverpool,
of these are Leeds, Wakefield, Doncaster, Sheffield,
Gainsborough, ^{Hull} Lincoln, & y. Port of Boston, as
soon as y. Navigation is completed which
is now carrying on between y. two last mentioned
Towns.

Not only many of y. above ^{recited places,} ~~mentioned Towns~~
but those ^{great & opulent Towns} of Manchester, & Warrington,
& Liverpool will gain access to y. Ports of
Hull & Boston

And all these Towns of Trade & Manufacture
communicate with each other to their prodigious
& reciprocal Imolument of them all.

The Quantities of Traffic, or its kinds, ^{it} will
 be carried on amongst all these Towns, ~~as their~~
~~respective Advantages~~, when ^a Expense of
 Conveyance will amount to but two Shillings
 a Ton for sixty Miles Freight, will become
 so ~~numerous~~ vast, & so various; &
 their reciprocal Advantages so intricate;
 as to bear no Estimation to any Degree
 of Accuracy.

Add to this, ^{it} ^a Articles of Trade
^{it} are now convey'd by Land from London
 to Manchester & Liverpool; & their Returns,
 will immediately by means of ^a new
 Navigation pass half of ^a way by Water.
 And ^a heavier Commodities, ^{it} were sent

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round of Lands led to of Port of Liverpool,
will come of them for of greater safety &
Expedition be brought down to Birmingham
as back Carriage; & embark'd at of nearest
port of of new canal, for of Towns above
mention'd.

The Merchant-ships of Hull make two
Voyages annually to Petersburg & of
Baltic, whereas those of Liverpool at
present make but one Voyage from of.
Danger & Difficulty of getting at some
Seasons round our own Island: And the
Merchants of Hull labour under similar
Disadvantages in their Voyages to of western
parts of of World. But by the Facility
of Communication made by the new Canal
between of two Ports, many Articles of
Merchandise will be mutually sent from of
one to be ship'd at of other, to of Benefit of both.

In Time of War such a Convenience of Communication between \mathcal{V} . Ports of our own Country is an amazing Advantage to Commerce in general: as \mathcal{V} . Price of Insurance, which is at those Times extravagant, is saved to \mathcal{V} . Proprietors, & \mathcal{V} . Ship & Cargo, prevented from falling into \mathcal{V} . Enemy's Hands, is saved to \mathcal{V} . Publick.

And if an Invasion should ever be attempted, as it has often been threaten'd on this our Island, \mathcal{V} . Ease of conveying Artillery & warlike Stores from our Arsenals along these Canals, must contribute much to check \mathcal{V} . Progress of such a Force, & may be a principle means under Heaven of continuing to our Posterity, \mathcal{V} . Freedom both of Government & of Religion, that

blesse & dignify this happy Nation.

Conclusion

There is no subject of more importance to a kingdom in arts well-instructed and in Trade high-flourishing, than the proper employment of the Poor; for this purpose our Laws are innumerable and a plan invented by ability and digested with industry was lately laid before - the legislative power for this purpose which was however at length rejected from some difficulties in the execution But we can not but felicitate this country that the many new articles of employment produced by so extensive a navigation will prevent the number

of Port beyond any compulsive Law
as is well enough express'd by the pious
Mr Harvey whose sentiments on this head
we beg leave to ^{obtrude} ~~obtrude~~ upon our
Reader. "By the grand and beneficial expedient
of navigation every Tide conveys into our
Ports the wealth of the remotest climes, and
brings the abundance of the Universe to be
unladen on our Quays: whilst almost every
private House in the Kingdom is ~~employ~~
embellished or accomadated from the four
quarters of the globe. The sea is no
respector of Persons. She deals out her
liberalities to all; to the wealthy such
as are ~~suited~~ suitable to their circumstances; to the
indigent, such as are best adapted to their
condition. If she ornaments the Abodes of

Theron to Aspario. Letter 9th

the first, she employs the Hands of the last; — furnishes these with usefull Labours, those with elegant accommodations. What a Multitude of industrious People acquire a livelihood, by — preparing the commodities intended for exportation! And what a multitude of dextrous artificers maintain their Families, by manufacturing the Wares — imported from abroad!

It is reckoned a valuable Species of Beneficence to provide proper Work for the Poor. This withdraws them from many Temptations and preserves them from much Wickedness. It hinders them from being a Burden to themselves and a Nuisance to the Public. How extensive is the Correspondence of the Sea and how large her Demand for —

Workmen! Into what Branch of Trade does she not enter? What kind of ingenious Science or usefull Toil, does she not — befriended? How many Millions of honest, but needy Persons are engaged in her Service? And how amply are they repaid for their Pains! —

Description of w. navigable
works of his Grace W. S. of Br. Defrets

To give w. distant Reader some Idea of w. manner of conducting navigable canals we ^{have} thought proper to add an Account of those already completed in Lancashire & Cheshire by the Duke of Bridgewater.

additions to certain Places of
 2d. second part.

"When Things are in Motion, Trade
 begets Trade, as Fire does Fire, & People go
 much, where much People are already gone".
 fr Wm Temple. Essay on the Trade of Ireland

If we consider the Number of Horses
 in a mercantile View; we do not mean
 the Number necessary to carry on our
 Home-Business, but the Number that can be spared
 for foreign Markets. Hence considering
 Horses as an Object of Commerce, the
 Husbandmen can rear as many, & spare
 more; if he does not it proceeds from
 his finding other kinds of Cattle more bene-
 -ficial.

Note upon the preceding sentence

for W^m Temple in his Essay on the Advance-
ment of Trade in Ireland recommends
the use of oxen for plowing & other
purposes of Husbandry, & adds that hence
"the Race of Garrans (little Horses) would
decrease, & so make Room for the Countries
maintaining the greater Number of Cattle,
which makes a foreign Commodity, though
they die by Age or Accident, whereas the
other makes none at all." Printed in
London. 1709. Miscellaneous Essays.

The new navigation being free to all, &
the Tolls at the Locks being much less than
those at Turnpikes, & the Expense of building
a Boat little more than half that of a
broad-wheel Wagon, & its Burthen four

Is it not ~~dangerous~~ to say too Extravagant
to say the only possible means to save
this &c

times as great, & this drawn on ^{f. 47r} ~~the~~
Trot by one Horse, are circumstance of
inconceivable benefit to ~~the~~ Farmer.

Nor do ~~the~~ Improvements in Trade &
Manufacture alone procure a Lively Load
to thousands employ'd by ~~the~~ Merchant, &
Mechanic; & Ease & Luxury to ~~the~~ landed
Gentlemen; but in respect to ~~the~~ Circumstances
of our national Debt, are ~~the~~ only possible
means ~~that~~ ^{which} can save from Ruin ^{may be compared to} this great
& flourishing Nation! which ~~the~~ ^{who} an
adventurous & active Merchant, puts himself
to so great an Expense in carrying on
a most extensive & astonishing Commerce,
~~at~~ ~~the~~ Moment ~~the~~ Balance of his Profits
declines, his necessary Debts & Expenses
sink him into Bankruptcy & Ruin.

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Where Dr Halley is mention'd please to
add a note to y. bottom of y. Page x

x Philosophic. Transact.

Near y. End of y. second Part, please to add
y. following note, & erase something about
patriot-ministry, & add "Wisdom" in its place
or alter y. whole sentence. y

y. Land being in Plenty in America, & so cheap
yt. a labouring Man, yt. understands Husbandry, can in
a short Time save Money enough to purchase a Piece of
Ground large enough to subsist a Family. no Man
continues long a Labourer or a Journey man for others,
hence y. ~~Danger~~ of our Colonies interfering with their
Mother Country in Manufactures, yt. require Labour, is
too remote to require y. Attention of Great Britain;
& in proportion to y. Increase of y. Colonies a vast
Demand is growing for British Manufactures, a Market
wholly in y. Power of Britain, which will increase
in a short Time beyond her ~~Power~~ ^{possibility} of supplying.
The Interest of G. Britain with regard to her Colonies.
London 1760 printed for T Becket in y. Strand. Pr. 1s. supposed to be
written by Dr Franklin of Philadelphia."

Part. 3?

