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.. A N
A P P E N D I X :
O R,
F U R T H E R R E A S O N S
In Support of the
P L A N or P R O P O S A L S
For the E A S Y and E F F E C T U A L
A M E N D M E N T
O F T H E
R O A D S.

By Way of A N S W E R
T O
Several O B J E C T I O N S.

By the same A U T H O R.

L O N D O N :

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A N
A P P E N D I X :
 O R,
F U R T H E R R E A S O N S

In Support of the
**PLAN OF PROPOSALS for the Amend-
 ment of the ROADS, &c.**

WHEN I published the foregoing Treatise, I did not in the least imagine it would be necessary for me to add any Thing thereto, as believing it would sufficiently express the true Intent thereof; and because I was inclined to hope, that Hints only, on a Subject so important, would suffice to prove the Utility of the Proposals therein.

I was not at all anxious about the Fate of the Performance, whilst, unambitious of the Name of Author, and prompted thereto only by my Wishes to serve the Publick, in firm Reliance on their Candour, I thought myself secure

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at least of their favourable Reception: And I have not been deceived therein; for I have had the Satisfaction of hearing (whilst I was myself unknown) my Intention at least generally approved.

But I have also heard several Objections and Difficulties started against some Parts thereof, which may require some further Notice; and shall, therefore, in the following Pages, impartially state all of those I have yet heard, and also briefly offer some further Reasons; which, I hope, may contribute not only to their Removal, but also more effectually to support the general Design.

And first, concerning the Proposal relating to Waggon, &c. that their Horses should draw abreast:

It is objected only, that they must then be driven from a Seat behind, with the additional Expence of a Postilion-boy; because, many of the Horses in such Teams being of Spirit, a single Driver will not be able otherwise to manage them.

To which, if it does not of itself appear to be only a further Reason to prove the Utility, by the Security of this Method of Driving, I answer,

That the present deep Ruts, and their Furrows, are the Ditches and Banks between
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tween which only, the Horses can pass; and those, therefore, dangerous in other Respects as they now be, are the principal Guidances by the Assistance of which the Drivers are able to manage so many in one long Team before them; of which themselves are so sensible, that, until they come to such Roads from their Inns in Town, where there are no such Tracts to guide them, they have their fore Horse constantly also led by a Porter from the Inn; although, upon the Roads, as the Horses now are, almost buried in their well-known Paths, their Drivers very frequently trust them even many Miles to their own Management.

There are numberless Instances of the Fatality of their present, but too uncertain, Practice, and to prove the Impossibility of managing, with any absolute Security, their Six Horses in a Length as they now travel, when they happen to require any Management at all, with one Driver only.

And, in Conversations I have often had with the most sensible Drivers, on this Subject, although they have generally indeed declared it possible to drive them so many Years, without any Accident occasioned thereby, they have

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always nevertheless admitted, that, if any of the Horses are vicious or untoward, it is impossible for any one Man, in that Manner, to manage them.

And, I dare say, it will be unnecessary to prove, that, if we should cure, or nearly prevent, all those horrible Guidances, the Ruts, either the Foremost or Thill Horses of the present long Teams must be too much neglected; for it is most apparent they will then all of them require to be more closely attended to, as there will be no such Guidances, or formidable Walls, to be overleaped.

And it is well known, that, when the foremost Horses are, at any Time, in Confusion, the Driver can now only instantly apply himself to the Thill Horse; and then fortunate is he, if, with his utmost Strength, he can guide only the Carriage, until those Horses have recovered themselves, and become steady again:

Whilst, on the other hand abreast, our Coachmen with their Reins, and in their commodious Situation, can easily govern even the most unruly Horses; and the additional Postilion-boy (who would be otherwise also useful) would save the now necessary Expence of another
other

other Horse for the Driver to ride upon ; which would also, I believe, be a Balance in Favour of such Waggon Owners,

But I had hardly imagined another Doubt, relating to the Independancy of Horses in this Manner, required any further Consideration, until lately, when I have (and by an understanding Person too) been desired to offer some Reasons, why, if the Two Lines of Horses should happen, at any Time, to draw with unequal Strength, they may not thereby alter the Direction of the foremost Wheels, and thereby, and by their thereby increased Friction on the Sides of the Ruts, (of which by the way, we hope, there would then be none at all) occasion a Hinderance in their Draft.

And, in Answer thereto, (although if there were any material Force in this Objection, the Farmers need only more carefully match their Horses by their Strength) I shall appeal to the Observance of those many * Carriages, who, in order to obtain some of the very Advantages we are now wishing to the Waggon Owners, have been long accustomed to quarter in this Manner, and sometimes with One Horse only, without
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* See also hereafter, page 11.

the least Inconveniency ; and our Post-Chaises also all of them, and even the Four-wheeled ones, are likewise drawn upon the same Principle ; their Shafts being the Conductors by which, in whatever Path the Horse may go, their Wheels are still always kept in a rectilinear Direction with the Road ; and so likewise the heaviest Waggon, with Shafts skilfully adapted, (and these because they are brought up and fixed to the Collar of the Horse, may therefore, for their greater Certainty, and the more solid Fixture of the foremost Horses, be thought preferable to a Pole) might, with proportionate Ease, be drawn in such Manner, as that I dare be confident Experiments would prove, were their present Five Horses, to be so placed in one Line only, in a Quartering Shaft, upon level Ground, they would not in drawing be sensible of any material Difference ; for the Thill Horse even then only could be possibly affected with any Power of Guidance, which would be of much less Consequence than their present Strains and Shakes, occasioned by the Ruts.

And their respective double Lines abreast being therefore so independant on each other, for the other Reasons
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Further REASONS, &c.

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mentioned also in the former Considerations thereon, I apprehend it is self-evident, they will altogether be advantaged by an Increase of Assistance from their Companions.

And, further to prove the Use and Necessity of Horses going in this Manner—and also concerning the proposed certain Distance cross-ways between the Wheels.—To which last only it has been said, This better omitted; for, as the Carriages might, *and then most certainly would*, be made of different Widths, their broad Wheels, as Rollers, would then also roll different Parts of the Road, and be therefore a Furtherance to the Ends proposed.

I beg Leave to observe, that the present Width in the Clear within cross-ways, between the Wheels of all Coaches, &c. being Four Feet and Four Inches, and that of the Waggon, &c. (with their narrow Wheels, as they are most commonly used) about Four Feet and Eight Inches, there is now, therefore, but just convenient Room, on each Side of one of the ordinary or lesser Ruts of such Waggon, for the Quartering Tract; and one Line of the Horses of all Carriages, which travel in that Manner, being of Necessity to go in the single
Waggon

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Waggon Path, howsoever deep, that also may, by their long Teams, be worn, in Lanes, where there is only Room for One Waggon ; or, where their several Tracts are drawn too near each other in the present Form, for want of a sufficient Space on both Sides, of one at least, of their Ruts, it is impracticable for such Quartering Carriages to travel at all.

And, by Parity of Reason, I fear, when the Nine Inch Wheels are extended to Six Feet and Two Inches, unless they likewise quarter, it will be found a too grievous Impediment to such other Carriages ; for the Waggon Horses themselves, passing always in one beaten Path, have been found to wear even that to a very considerable Depth.

And although I am satisfied, the broader Wheels only, if more cannot be yet obtained, are desirable, as even in the softer Grounds they cannot make any Impressions of material Significancy ; yet, if they should leave any at all, extended, as they will then be, into the Quartering Tracts, I submit to impartial Judgments the Consideration of their Consequences to such other Carriages, or otherwise ; the beaten Paths of the Teams worn, as they now are, just
twice

twice as much with Six Horses in Length, as they would be in double Lines with Three only, being also of Necessity one of the Quartering Tracts; those Carriages must, I doubt, at least always go upon the Tilt, which, it is demonstrable, would then be of infinite Prejudice to the Draft.

Whereas on the other hand, by the united and co-operating Methods, and concurring Reasons, mentioned in the Proposals and former Considerations thereon, under that Article, I conceive all Carriages would then travel upon the Square, and with equal improved Advantage.

Even the Cross-roads would most naturally, of themselves, fall into their intended Form, without One Shilling of Expence on that Account; the little necessary one, of only laying down their Ruts for the Waggon to pass, being all that is requisite also for this Purpose: And this at all Adventures must be done for only the broader Wheels, as there are few or none of those Carriages but which also travel in such Cross-roads (and, by the way, ought yearly to be done under the present Establishment); and after that, and even from the first Instance, less than One Half of

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the present necessary Labour and Expence for Repairs will be found well enough to suffice.

And, if there is not some standard Width (and the proposed one is calculated to the present Dimensions of those Carriages) for their Wheels, by an unrestrained Liberty of doing therein as they liked best (when the Ruts are no more) from the Whims and Caprice of Mankind, many and great Inconveniences and Confusion will most certainly arise; our very Roads will be found monopolized, and the wealthiest Waggon Owner, with his enormous Carriage, will have Power of distressing his narrower pocketed Brother, by obstructing his Passage in Places where otherwise Two moderate equal sized Carriages might commodiously pass each other.

The other proposed Methods or Rules of Travelling, or the future Possibility of them, would be thereby in a great Measure defeated; and the general Complaint of narrow Ways, instead of being lessened, would undoubtedly be increased; for many of those now wide enough, would then also be found too narrow to answer such uncertain Purposes.

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I must own indeed, that such are the Prejudices of the Generality of Mankind against any Innovations, and such their Attachments to their former Customs, how much soever they may require Alteration, that it is hardly practicable to persuade them even to their own Interests; and that partially only, the proposed Regulations (if more cannot be at once obtained) by way of Introduction, and to evince their Utility, are to be wished for: Yet I am inclined to hope, for the Sake only of the Publick, that such other of the before-mentioned Proposals at least, or such other Measures as shall be found materially necessary to be attendant on, and operating Assistants to, the broader Wheels, and which will be productive of the most salutary Effects to all Ranks of People, without being the least Burden to any of them, may be effected in such Manner, as that any future necessary Laws may only be additional Amendments, and not Alterations.

I have not the least doubt, but that the heaviest Carriages may be * easiest, and

* See also foregoing, page 5.

And for these Reasons: The Rabbit and other Carts also of many Places, and in general in the County of *Essex*, with Two, Three, and Four Horses, and

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and most expeditiously, drawn by their Horses abreast;—the Roads will then every where of themselves naturally become passable for all Carriages, without
any

their weightiest natural Burdens, now constantly travel in this Manner. The Stage Coaches also of that County, with Four Horses only, I have seen freighted with Eighteen or Nineteen lusty Persons, in and about them, besides other Luggage; themselves being likewise suitably heavy, and laden with Iron Furniture, &c. for their Security: All of which, allowing only One Hundred and an Half Pounds Weight for each Person, will easily, I presume, be supposed, on a moderate Computation, to amount to considerably more than Two Tons and an Half; and, perhaps, might be found more nearly equal to even the present statutable Waggon Allowance: And with this they can, and do constantly, run Fifty-one Miles, from *Celchester*, (and, in the Summer Season, from *Harwich*, which is upwards of Twenty Miles further) in One easy Day only: And, I am well assured, several of their heaviest Waggon, laden with Wool and other Staple Commodities, sensible also, no doubt, of the Conveniency of doing so (on good Roads) for some Years past (before the late Statute with their Six Horses, and since that Time with Five only) have continued drawing in this Manner: And, to this Custom of drawing so, the remarkable Goodness of the high Roads in that County is, in a great Measure, attributed. Those Roads are every where spacious enough for several Carriages; and it is observable therein, that only One Waggon Tract, and its Ruts (or, in some Places, Two at most) of any material Consequence, are at any Time to be found: Which may also serve, I apprehend, abundantly to prove the Use of this Method of Practice, and to induce every one to wish for, in all Places, the like Kind of Advantages; and which, added to the other Assistance of the broader Wheels, will then undoubtedly, at once, completely answer all the most desirable Ends.

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any additional Expence whatsoever, and require no future Alterations in that Respect; — the Waggon Owners may be allowed to carry any Weight they can draw with Six Horses, and will be thereby greatly benefited; — the Weigh Engines (against which they now clamour so loudly) would become needless; — and all Persons being convinced of these by their Consequences, will afterwards not only most chearfully submit to, but be desirous of, any further necessary and effectual Regulations.

Neither am I unsensible, with how great Tenderness some Persons may rather incline, by Rewards, to tempt and encourage Mankind to the Approbation of their own Advantages, and by Length of Time, and its Consequences, to open the Eyes even of Infatuation, than to compel them thereto: And it is with all due Deference to such humane Opinions I shall briefly only remark,

That, from the very Nature and Intent of the broader Wheels (and so likewise may be easily conceived of the other proposed Regulations) they cannot, nor can any of them, be of their intended Use, unless generally ordained.

For

For otherwise they would be only by some observed, and the remaining narrow Wheels would still be harrowing up the Ground much faster than their broader ones could roll it down again, to their unsupportable and continued Hinderance; the first only mentionable Task would be by them always performing, never to be completed; and even those few must thereby shortly be effectually disheartened: The good Effects of the Intention could then never be known at all; for the Roads only would be daily rolled by some, to be by others torn up again; and, by the lasting Difficulty of drawing those broader Wheels over the then continuing Ruts, all the Inconveniencies before-mentioned will most naturally recur.

Neither would it be easy to determine how, or in what Manner, and for what, such Bounties should be raised and paid: If out of a publick Fund, this would be attended with its Difficulties; even the Receivers thereof will afterwards be at Liberty to fall back again into their former Usage, and most certainly must, in a short Time, do so, unless such new-intended Regulation should become general, and every eventual good Effect would be thereby defeated,

feated, and the Farmers, &c. would be only more disgusted by an unsuccessful (because not equal) Experiment: And, were the Custom to become general, such Bounties must be then paid to every Carriage Owner, to an immense Sum.

And, if the Conformers were to be exempt from Turnpike Tolls (which, it has been said, appears the most equitable, as it would best encourage them to Perseverance) this also would be attended with much worse Consequences.

For, as many Persons have advanced large Sums of Money on the Credit of, and payable out of, those Tolls; if the Conformity were to become general, those Funds must cease, and their Debts could therefore then never be paid at all; and if it were to be only so ineffectually partial, those Debts would also be proportionally burdensome or precarious, and their Credit the less; and the conforming Parties could never be again chargeable thereto but by another Act for that Purpose, which would destroy the Meaning of the first.

Whereas if it is ordained by a general Law, all Persons must conform, to the mutual Advantage of all; and, by the Savings for Repairs, &c. the Commissioners

missioners and Trustees of such Turnpikes will be enabled the sooner to pay off those Incumbrances, until all are discharged; and then although, upon the most frequented Roads, it cannot be expected but that some auxiliary Tolls may be necessary, when their present Terms are expired, and Debts paid; Two in Four at least of the present Turnpikes will, I am inclined to believe, be found also needless.

F I N I S.

