## RAILROADS AND STEAM CARRIAGES

To the Editor of The Northampton Mercury-Sir,

As every thing relating to rail roads, or the application of steam, or any other elementary power, to the conveyance of goods or passengers is, at the present moment, of considerable importance to the public. I have taken the liberty to send you some extracts from the report of a select committee on steam carriages, ordered by the House of Commons to be printed on the 18th October, 1831, and just now published. Whoever reads this report, which is drawn up with considerable ability and talent, must be convinced of the practicability, and speedy application of steam to the propelling of carriages on the turnpike roads, as they now exist, without requiring one shilling to be expended, either in altering their line of direction or improving their surface. This important fact, which is fully established by the evidences of the different witnesses examined before the committee, should be very generally made known to the public, as it may save many individuals and families from ruin, who might otherwise be induced from the plausible, and wild assertions of the interested projectors of rail road schemes, to embark their property in such undertakings, which, if they were not before, are now clearly shown to be a most hazardous speculation.

The dullest, and most obtuse understanding must be convinced that where several millions are required to be expended in the purchase of lands, and executing all the works required, for the completion of an extensive iron railway, many years will elapse before they can be completed, or a return of capital expected, and that, during that period, considerable improvements will, unquestionably, be made in the construction of steam carriages applicable to turnpike roads.

The consequence of which will be, that passengers will be carried over the present lines of communication with nearly the same speed that they can be carried on rail roads, and with this additional advantage that they will pass *through the* towns on the intermediate parts of the main line, as they do at present, by stage coaches, where inns are already established, and where the connections, and business of the greatest number of travellers may possibly be situated; this, alone, will induce a greater traffic, than over a railway which cannot possess these advantages for ages, as they can seldom be carried within several miles of the intermediate towns, on the general line.

The number of passengers, therefore, that might otherwise be fairly reckoned on as likely to travel by a rail road, will be very materially reduced, if steam carriages travel on the present existing lines of turnpike roads; consequently, the income that might be expected to be derived from passengers over a proposed rail way, will be considerably diminished, if not wholly destroyed. It is not, indeed, at all improbable that the original subscribers may lose the whole amount of their shares as was the case in the building of the Waterloo (bridge, and the proposed tunnel under the Thames), for the proprietors of steam carriages running on the turnpike roads will not be encumbered with one shilling of debt, or interest for money expended in the construction of the roads, consequently they will be enabled to carry passengers cheaper than the rail way companies, who will have to pay the enormous interest of several millions expected in the making of the roads. To meet the low fares of the proprietors of steam carriages on the turnpike roads, they will be reduced to the choice of two evils, either to lower their fares to meet that of their opponents, or to travel without passengers, either of which cases will be equally destructive of the property invested in rail way undertakings. As to any idea of a profit arising from carrying heavy goods by a rail way, that is completely set at rest, by the fact that the Manchester and Liverpool rail way company are not able to carry a ton of goods except at considerable loss; it is, therefore needless to waste time in any speculations on that head. All the profit that can be expected to arise from the traffic over a rail way must arise from the transit of passengers alone. Any cause, therefore, that will diminish the number of passengers travelling over a railway, will tend to increase the risk of rail road speculations, and none will have a greater effect than the running of steam carriages on the common turnpike roads.

The possibility - I might almost say the certainty - of such an event taking place is clearly established by the evidence given before the Committee of the House of Commons on this subject. The report does not give the names or the members composing the committee, but from the circumstances of D.O.Jephson, Esq, being the chairman and Davies Gilbert, Esq. (the later President of the Royal Society,) and Colonel Torrens, forming part of it, there can be no doubt that it consisted of some, if not all the scientific men, and those most capable of judging of such matters, that were to be found in the House of Commons. The opinions of such men should, therefore, have great weight with the public.

The witnesses examined by the committee were-Mr.

Goldsworthy Gurney, Mr. Walter Hancock, John Farey, Esq. Mr. Richard Trevithick, Davies Gilbert, Esq. M.P. Mr. Nathaniel Ogle. Mr. Alexander Gordon, Mr. Joseph Gibbs, Thomas Telford, Esq. Mr. William Alltolt Summers, Mr. James Stone Mr James Mc.Adam, Mr John Macneill, Colonel Torrens, M.P.

I will, in the first place, give extracts from the report of the committee, and the important conclusions they arrived at, and afterwards, extracts of such parts of the evidences of the different witnesses, as may appear to be of interest or importance to the public. I am Sir, your obedient Servant,

J.M.N.

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EXTRACTS FROM THE REPORT OF THE COMMITTEE

The committee proceeded in the first instance.

.....carriages on common roads, by means of steam or mechanical power, had been carried into practical operation; and,

whether the result of the experiments already made had been sufficiently favourable to justify their recommending to the House, that protection should be extended to this mode of conveyance, should the tolls imposed on steam carriages, by local Acts of Parliament, be found prohibitory or excessive"

"In the progress of their inquiry they have extended their examinations to the following points, on which the chief objections to this application of steam have been founded:-viz. The insecurity of carriages so propelled, from the chance of explosion of the boiler, and the annoyance caused by travellers, on public roads, by the peculiar noise of the machinery, and by the escape of smoke and waste steam, which were supposed to be inseparable accompaniments."

"It being also in charge to the committee 'to report upon the proportion of tolls which should be imposed upon steam carriages,' they have examined several very scientific engineers, by whose observations on the causes of the ordinary wear of roads, they have been greatly assisted."

"The committee were directed also 'to report on the probable utility which the public may derive from the use of steam carriages.' On this point, they examined a member of the committee, well known for his intelligence and research on subjects connected with the interest of society, and they feel that they cannot fulfil this part of their instructions better than by merely referring the House to the evidence of Colonel Torrens."

"These inquiries have led the committee to believe that the substitution of inanimate for animal power, in draught on common roads, is one of the most important improvements in the means of internal communication ever introduced. Its practicability they consider to have been fully established; its general adoption will take place more or less rapidly, in proportion as the attention of scientific men shall be drawn by public encouragement to further improvement."

"It appears from the evidence, that the first extensive trial of steam, as an agent in draught on common road, was that by Mr. Gurney, in 1839, who travelled from London to Bath and back, in his steam carriage. He states, that although a part of the machinery which brings both the propelling wheels into action, when the full power of the engine is required, was broken at the onset, yet that on his return he performed the last eighty-four miles, from Melksham to Cranford bridge, in ten hours, including stoppages. Mr. Gurney has given to the committee very full details of the form and power of his engine, which will be found in the evidence.

"The committee have also examined Messrs. Summers & Ogle, Mr. Hancock, and Mr. Stone, whose steam carriages have been in daily use for some months past on common roads. It is very satisfactory to find, that although the boilers of the several engines described, vary most materially in form, yet that each has been found fully to answer the expectation of its inventor. So well, in fact, have their experiments succeeded, that in each case where the proprietors have ceased to use them, it has only been for the purpose of constructing more perfect carriages, in order to engage more extensively in the business."

"When we consider that these trials have been made under the most unfavourable circumstances, - at great expense, - in total uncertainty, - without any of those guides which experience has given to other branches of engineering; - that those engaged in making them are persons looking solely to their own interests, and not theorists attempting the perfection of ingenious models;-when we find them convinced, after long experience, that they are introducing such a mode of conveyance as shall tempt the public, by its superior advantages, from the use of the admirable lines of coaches which have been generally established - it surely cannot be contended that the introduction of steam engines on common roads is, as yet, an uncertain experiment, unworthy of legislative attention."

"Besides the carriages already described, Mr. Gurney has been informed, that from 'twenty to forty others are being built by different persons, all of which have been occasioned by his decided journey in 18 2 9.'"

"The Committee have great pleasure in drawing the attention of the House to the evidence of Mr. Farey. His opinions are the more valuable, from uniting, in so great a degree, scientific knowledge to a practical acquaintance with the subject under consideration. He states, that he has 'no doubt whatever but that a steadily perseverance in such trials will lead to the general adoption of steam carriages;' and again, 'that what has been done proves to his satisfaction the practicability of impelling stage coaches (by steam) on good common roads, in tolerably level parts of the country, without horses, at a speed of eight or ten miles per hour.'"

"Much, of course, must remain to be done in improving their efficiency; yet Mr Gurney states, that he has kept up steadily the rate of twelve miles per hour; that 'the extreme rate at which he has run is between twenty and thirty miles per hour.'"

"Mr Hancock reckons, that with his carriage he could keep up a speed of ten miles per hour, without injury to the machine."

"Mr Ogle states, that his experimental carriage went from London to Southampton, in some places, at a velocity of from thirty-two to thirty-five miles per hour."

"That they have ascended a hill rising one in six, at sixteen and a half miles per hour, and four miles of the London road, at the rate of twenty-four miles and a half per hour, loaded with people."

"That his engine is capable of carrying three tons weight, in addition to its own."

Mr. Summers adds, that "they have travelled in the carriage at the rate of fifteen miles per hour, with nineteen persons on the carriage, up a hill one in twelve."

"That he has continued for four hours and a half to travel at the rate of thirty miles per hour."

"That he has found no difficulty of travelling over the worst and most hilly roads."

Mr. James Stone states, that "thirty-six persons have been carried on one steam-carriage."

"That the engine drew five times its own weight nearly, at the rate of from five to six miles per hour, partly up an inclination."

> (To be continued.) (From a Correspondent.)

London and Birmingham Railway. - A meeting was held at Leighton Buzzard, of Monday last, for the purpose of ascertaining the sentiments of the owners and occupiers of land affected by the intended railway, and its passage through the county of Bedford a corner of which it crosses. This, however was not effected, as a number of persons owning and occupying gardens, and other small properties, in the immediate neighbourhood of Leighton Buzzard, formed a majority of the meeting, and prevailed upon passing a resolution of assent, unsupported by the principal landowners affected by it in that county. This circumstance is not likely to have any ultimate effect on the measure, as it will appear by the statement in next week's paper how very large a majority of them are decidedly adverse to the project.