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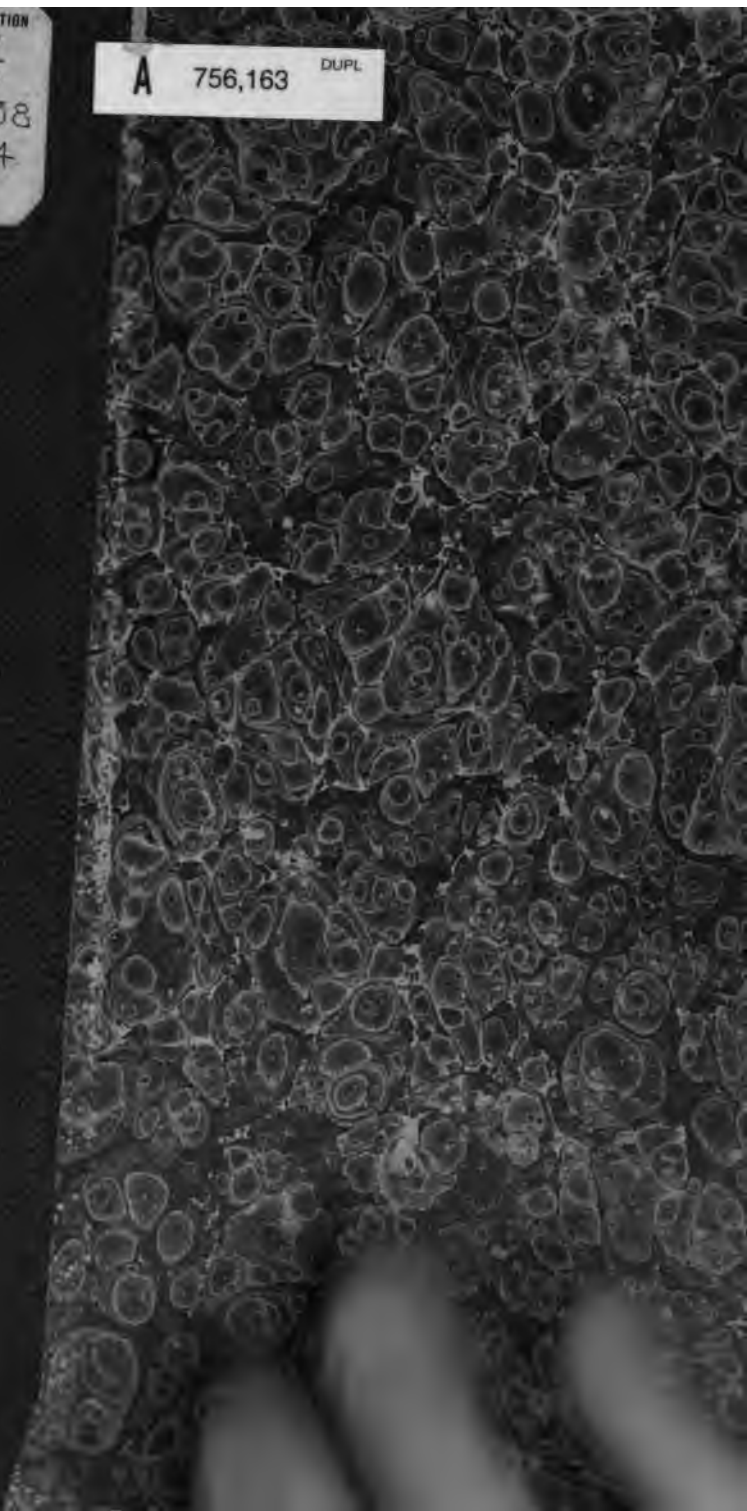
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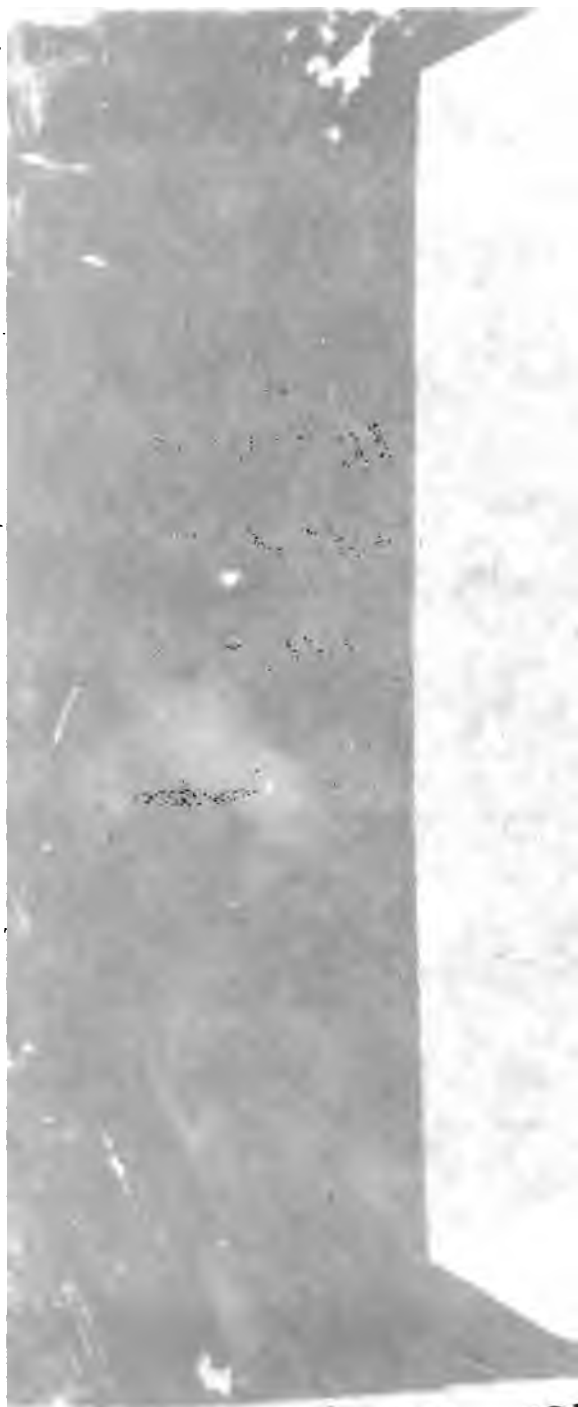


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OBSERVATIONS
ON THE
PROPOSED RAILWAY AND TUNNEL
FOR CONNECTING THE
RIVER CLYDE WITH THE CANALS, &c.
AT GLASGOW;
AND ON THE
OPPOSITION TO THAT MEASURE.

ADDRESSED TO
THE MAGISTRATES AND OTHER MUNICIPAL AUTHORITIES
AND CITIZENS OF GLASGOW—THE TRUSTEES AND OTHERS INTERESTED IN THE
RIVER CLYDE—THE FEUARS OF BLYTHSWOOD—
THE PROPRIETORS OF THE UNION CANAL—AND OTHERS.

GLASGOW:
PRINTED BY HUTCHISON AND BROOKMAN,
FOR JOHN SMITH & SON, GLASGOW;
OLIVER & BOYD, EDINBURGH; AND
LONGMAN, REES, ORME, BROWN, & GREEN, LONDON.

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OBSERVATIONS, &c.

Soon after the Report and Resolutions on the proposed Railway for connecting the Broomielaw harbour with the upper level of Glasgow were published, the measure was attacked in a pamphlet titled "Remarks on Messrs Grainger and Miller's Report," which has been extensively and gratuitously circulated; and much pains have been used to promote its sentiments.

Though the publication is anonymous, yet it is right to offer a few counter remarks, that fallacies broadly asserted and widely propagated may neither effect the author's object, nor add to the expense or delay of the work. We are also desirous of its effects being considered by all parties any way concerned; satisfied that the better the undertaking is understood the more it will have the support of every one connected with Glasgow, excepting those whose monopoly it will injure.

Many suppose this pamphlet was got up on account of the Forth and Clyde Canal Co.—but this is a mistake, and we hope to show that the measure will benefit that Company. This benefit will be denied by those Canal proprietors who are interested in supplying the east coast of Scotland from the Lanarkshire coal fields, and in a monopoly of a certain nature and extent in supplying the west; yet such motives are so opposite to those public-spirited principles which originated that national undertaking, and to the execution of which Government itself contributed, that it is utterly impossible that corporation would oppose a work which merely com-

reign sales are concerned: the Railway to the Broomielaw would of course infringe on this monopoly;—hence the wish to thwart it.

*Hoc Ithacus vedit, et magno merentur Atrida,
—hinc spargere voces, &c.*

It is not our business to inquire into the immediate effect of this monopoly on the Canal revenues, nor into the alleged refusal of the Garnkirk Company's offer, mentioned in the Remarks, to extend their Railway to the deep water at Port-Dundas, but we may be permitted to advise the proprietors of the Union Canal, as well as of the Great Canal, from rashly joining in the clamour raised by those whose "craft is in danger." The upper coal fields of Lanarkshire have as yet been wrought for little more than country sales. They are the largest and most valuable in Scotland, and when they shall be wrought by tenants of skill and capital like most of those in the low collieries or on the Monkland Canal for export, this attempt to confine them to Kirkintilloch or the Great Canal and to cut them off from their natural vent to the Clyde at Glasgow, is the way to compell them to find access to the east coast across the summit they are already so near, and thus materially injure the profits of the Canal proprietors on other articles as well as on coal.

The author addresses the Magistrates, and recommends them to improve the upper navigation of Clyde, not from any desire of their doing so, but in the hope that agitating that measure may impede the execution of the one he dreads. But while it is clear, that facilitating the transport of coal from *that* quarter to the Broomielaw will not interfere with the Kirkintilloch Co., it is equally certain such a measure is no way incompatible with that now proposed: on the contrary, it may facilitate it from imposing on the low colliers the necessity of exertion, and thus add to its claims on the public. In regard to the alleged superiority of the lower coal, however, though we differ from the author,

we need not argue the matter. The great bulk of the coal in the lower parts of the county is of a materially different quality from that in the upper parts; and if the former is preferred for the purpose of family consumption, the latter is so for those of the merchant.

Neither are we at all disposed to quarrel with the author's suggestion to the Magistrates to form wet docks at Glasgow, though also made with no wish for their execution. These would be highly desirable, and in all likelihood accelerated by the proposed Tunnel Company, whom they would materially benefit; but the writer has no authority but his own wishes for saying that the mere supplying water for docks is "the only thing which would justify the expense of a communication between the Canals and the Broomielaw."

Here we beg the attention of our Magistrates, and those of Edinburgh, and the Union Canal Co., to the circumstance that the communication now proposed was formerly recommended to their consideration by that eminent engineer, Mr R. Stevenson, to whom the idea of perforating Blythswood-hill, in the very line now proposed, occurred so far back as 1817. That gentleman, in his Report to the Magistrates of Edinburgh, as to the best line of communication by a Canal from Edinburgh to Glasgow, recommended that the line should be carried to the Great Canal at Lock No. 20, and continued in the summit level of that Canal to Port-Dundas. "From Port-Dundas," says he, "the line crosses the public road at the village of Cowcaddens, and is continued by a short tunnel in a direct line through the Observatory hill to the low grounds of Blythswood. After this a convenient line is found through vacant grounds to Smithfield, at the Broomielaw, near which it terminates in the River Clyde, at the Tonnage Office." Here we have the authority of a most experienced engineer, not only for the practicability of a work like the present, but that even a Canal, by a Tunnel, not navigable for sea vessels, and burdened with the expense of no less than fourteen locks, would

have proved even at that time of great expediency and advantage to the trade between the two levels.

The quantity of goods transported by land carriers from Glasgow to Edinburgh is astonishingly great. The reason is chiefly the difference of expense between land carriage and trackage on the Canal being at present almost a shade. Goods from the Broomielaw are delivered in Edinburgh by the Canal at various rates, from 18*s.* to 30*s.* per ton; out of this the expense of cartage from Broomielaw to Port Dundas is paid, which is not less than 2*s.* or 2*s.* 6*d.* per ton. But goods are also delivered at and under 30*s.* per ton by land carriage the whole way; the inconvenience and expense of ordinary cartage to Port-Dundas, therefore enables the land carters better to compete with the Canals. But if this 2*s.* or 2*s.* 6*d.* were reduced to 6*d.* or 1*s.* or facility and competition afforded for this carriage, is it not manifest an advantage must arise to the Canals, especially in the competition for numerous articles where the charge of transport is already as low as it is possible for parties to maintain competition?

The Broomielaw Harbour is now the most important on the west side of Scotland, the Union Canal Co. and the Traders of Edinburgh and the east coast, therefore, in so far as interested in the trade of Clyde or the west coast, are proportionally interested in effecting the best and cheapest communication with that harbour. It is of infinitely more importance to them now when Clyde is deepened below Glasgow, and so much coasting business transacted there, than it was some years ago, and when Glasgow had no coasting trade. Hence a work which will complete the communication with the Clyde at this point, or even merely afford an additional and competing means of carriage to the Canals at Port-Dundas, must afford an immense advantage to all the trade of the eastward, and materially benefit the harbours of the Broomielaw, Port-Dundas, Port-Downie, and Grangemouth.

We do not conceal that some goods to or from the east, instead of going along the Great Canal the whole way to Bowling, may be sent by the proposed Railway to the Broomielaw, and that thus the Trustees of Clyde will receive dues on goods, which would otherwise be drawn by the Great Canal Co. ; but we maintain that this Railway must benefit the traffic of Glasgow and the whole west coast in general, with Edinburgh and the east coast, through the higher levels of the Canal. The carriage between these and the lower level of the Clyde, can only be obtained at present either by inconvenient cartage along the streets of Glasgow, or through the locks at Kelvin, and the western reach of the Great Canal, which never would have been executed if at that time the Clyde had been deepened to the Broomielaw, but the Canal would have formed a junction there. All those interested in the traffic between Glasgow and Grangemouth, and Edinburgh, and particularly the Trustees of the River Clyde and the Union Canal Proprietors, will, on considering the subject, therefore concur in our sentiments, and they will also be adopted by such Great Canal Proprietors as look to the original objects of that Company, or who admit that it is a surer and better revenue which arises from an increase of traffic, than from the length of distance travelled on their Canal.

It is needless here to argue with the Pamphleteer, about the expense of the proposed work, or the rate of dues, for on these points the Subscribers may naturally be supposed to have had better means of information than he is pleased to afford, and it is obvious that the work when executed, will not stand entirely unoccupied, nor be charged with dues so high as the expense of the present mode of cartage, and to the public and the incorporations we have named, benefit would arise from the mere existence of any improved or additional medium of transit between the points in question. We shall therefore proceed to notice his endeavours to excite the jealousy of the Monkland Canal Company against the proposed measure,

which he asserts is merely projected to give the Garnkirk Railway traders an undue advantage over that Canal.

In order to enable the Monkland Canal Co. to get the benefit of the Coltness and upper coal fields, some alteration will necessarily arise in the mode of conveyance on their Canal. They can scarcely stand aloof while improvements are making, or sought for, by all their neighbours; or, if they do, little of the demand at the Broomielaw can be supplied by them, where they have already rivalship, with the prospect of the upper navigation being improved. If the boats on this Canal, like some on the Tyne and Wear, were to be fitted with the *bodies* of Railway waggons, the Monkland Canal might at once get the full benefit, not only of the Broomielaw Railway, but of the Coltness and other Railways at the head of their works. Such improvement would, of course, be no ways acceptable to the Kirkintilloch Co., and less so to the Garnkirk Co.: but it is one in which the Ballochney Co., the Coltness Co., and the Broomielaw Co., have an interest in being considered, and, if possible, adopted. But even were no improvement adopted on the Monkland Canal, and the traders continued the use of scows as at present, and had to "turn over" the coal from thence, into railway waggons to be taken to the Broomielaw, it is untrue that the proposed Railway would give the Garnkirk traders any advantage they do not at present possess over the Monkland Canal traders. The *proportion* of advantage will rather be in favour of the Canal traders; for it will be easier to unship into a waggon on the proposed works than into a cart as at present; and assuredly the Garnkirk traders would not be under any necessity of unloading their coals from their Railway waggons, or of turning them over at all for the purpose of being taken *through the streets* to the Broomielaw; neither will there be any greater difficulty in delivering from the Railway waggons than from a common cart, which the writer admits does not exist when the Railway waggon is elevated some feet

above the surface where the cargo is to be laid down. To show the accuracy of this statement, and afford information of the mode by which coals may be taken from the termination of the Railway to any other place, and a description of waggon bodies to be fitted into the Canal boats, we have merely to state, that the body of the Railway-waggon is moveable, and placed entirely above the level of the wheels, so that it can be moved from thence to a corresponding ordinary wheel-carriage. Such waggons are constructing with the view to a similar purpose for the Liverpool Railway, and are the same which will be used by the Garnkirk Railway, whether the Broomielaw Railway be executed or not; nothing is simpler and easier than the transit of goods in Railway waggons, upon different frames and sets of wheels along the ordinary streets of a town. In Glasgow, the effects and advantages of such carriages are, of course, as yet known only to those whose interests has directed their attention to it; and the Monkland Canal Co. will, we trust, before it be too late, take the advice of some qualified judge whether, or how far, any of the suggested improvements can be available, instead of being deceived by jealousy of the Garnkirk Company alone, and fancied concessions from those who have no interest in common with themselves. As equal friends of the Canal and Broomielaw Railway, however, we hope their councils will be regulated by the true commercial principles which their Directors act upon in their private affairs, which are not to remain inactive, weighing whether an improvement shall most benefit their neighbours or themselves, and being content if they can keep an advantage from them, but to resolve on continuing the first in the trade, by turning the knowledge of every improvement and every possible competition to their own immediate benefit. By far the greatest portion of their coal is sent beyond Bowling; there are no dues charged on the river for coals, so that the Great Canal Co. regulate their dues between the Monkland Canal and Bowl-

ing, according to the expense of carriage from the Monkland basin, or Garnkirk Railway depôt, to the Broomielaw, the Monkland Canal Co., even although their traders were to have no access whatever to the proposed Railway, would therefore be direct gainers by the reduction which the Great Canal Company would make on the dues of coal carried along their western reach to Bowling.

But this leads us as friends of the Great Canal to make another observation as to the effect of the proposed Railway. We suspect that the loss by reduction of coal dues will prove to them "a great gain." The revenue of the river trust has much increased since the dues on coals were altogether taken off. We would ask what are the principles which have induced the proprietors of other Ship-Canals, navigable rivers, or harbours, (and the important difference between the Great Canal and most others as being a Ship-Canal must always be kept in mind,) to execute railways or afford facilities for the purpose of bringing them coal, or such bulky articles as are only taken on board for back freight in lieu of ballast, or where the ship masters are not secured in some more valuable back cargo. Have not the chief benefits thence expected and derived been more valuable goods inwards, or increasing the imports. In some cases, and to some extent, there certainly are dues drawn from coals shipped out in sea-borne vessels, but, in general, the advantage has always been found to arise from charging nothing upon coal or bulky outward cargo after being shipped into the sea-vessel, but in allowing them to clear with these as if they were in ballast alone. The trade of almost every sea-port town, will be found to have arisen and increased just according to the ease and facility with which some back cargo, such as coals, salt, &c. can be obtained; and nothing is more certain than this—we use the words of Adam Smith—that the exportation and exchange of surplus produce, (and what have we more entitled to that name in

Lanarkshire than coal) for something more in demand at home is the origin and cause of the prosperity of every commercial town. We apprehend, therefore, that if the dues on coal were taken off entirely at Port-Dundas, as they have wisely been at the Broomielaw, there would be an increase of imports, or more valuable articles brought to that port. Indeed this is no matter of opinion, for we have occasion to know, that more than once cargoes of iron rails shipped from Wales, and stipulated to be delivered at Port-Dundas, were nevertheless shipped to the Broomielaw, and the cartage to Port Dundas willingly paid by the ship-master, solely on account of the expense of the back cargo. We have also authority for stating, that several cargoes of grain have been delivered at the Broomielaw, and carted to Port Dundas, for similar reasons. The more encouragements and facilities, therefore, traders can receive in regard to back freights, the greater will be the resort to that harbour where they are afforded.

We beg also a word to the towns of Paisley and Renfrew, neither of which at present get immediate advantage from the Lanarkshire Railways, nor from the Canals. By the use on the Monkland Canal, and rivers Clyde and Cart, of the description of boats before alluded to, coals will be deliverable directly at either of these towns, and all along the Clyde and the Cart so far as navigable for barges. There will be no "turning over" from the first loading at Coltness, or Ballochney, until the delivery at these towns; and from the direct access thus afforded to the Canals and Railways, they will be enabled to reap the other advantages of our improved inland communications.

The trade of Greenock, Port Glasgow and Dumbarton, and others on the west coast, and of Stirling, Dundee, Dumfermline, and others, on the east, will also thus get to a greater degree the advantages of our improved river navigation at Glasgow, which admits vessels of 300 tons at com-

paratively very low rates ; and they will gain, at the least, 2s. per ton on the transit of all their goods.

In short, if the measure proposed is fairly considered, it will be found the most important and beneficial to the trade of both sides of Scotland that has been suggested since the execution of the Great Canal and the improvements on the river Clyde, which last it will effectually and doubly unite with the Forth ; and what portion of trade may be taken by the River from the lower and less convenient reach of the Canal will be more than compensated in the additional trade arising to the eastward, on forming the junction at what is now the natural point, or focus of business and emporium of the trade of *both* navigations.

We come now to consider the local effects of the measure. We agree with the Author, that the Milton and Blythswood estates are different in their natures, the one being adapted for public works, the other for residences ; but we deny that any competition will be created between these two proprietors, or that inconvenience, public or private, will arise from any effect of the Railway on the purposes for which these properties are applicable ; on the contrary, they will be materially benefited.

In the Blythswood lands the line will pass from one end to the other under ground the whole way from the powder magazine to the south side of Argyle-Street, and, though it may afford to the inhabitants a covered and shorter walk in wet weather from each end, there can be no communication or effect from the Railway and tunnel, excepting what Blythswood chooses to make for his own benefit. We would certainly suppose, that, instead of family residences for which the feus as yet made have not been destined, the whole Holm-lands south of the line of Dr Mitchell's chapel, at least, would be most beneficially occupied as warehouses and counting-houses, which would be enhanced in value by proximity to the Tunnel mouth. But the lands if destined for family residences will be no way injured, as the pro-

posed work will pass under the carriage-way. Every building indeed along the line having any tendency to dampness, would have direct benefit from drainage; in the holm lands in particular, common sewers will run along each side of the Tunnel lower than the bottom of any neighbouring cellarage whatever.

The fears of Blythswood will particularly observe, that there will be no operations whatever under any part of their dwellings or buildings, but that these are exclusively to be conducted under the centre of the street. The work consists of two archways, neither of them more than 12 feet broad by 15 feet in height; and not more than five or six feet in length of one of these, at one time, will be excavated, while the masonry will be progressively and alternately brought forward as these excavations respectively take place. The nearest side of the Tunnel or excavation will be more than 15 feet from the line of any house, and at Blythswodhill, where the ground is highest, the top of the Tunnel will be 76 feet and the bottom 91 feet under the surface; and at the north side of the Sauchyhall road, where the ground is lowest, the top will be 37 feet and the bottom 52 feet under the surface; and throughout the whole line the material is either rock or the most tenacious clay. Any possibility of danger or inconvenience whatever therefore appears out of the ordinary course of nature, and certainly beyond all past experience in similar cases. We might remind our readers of the magnificent subterranean archways or cloacæ under the city of Rome—“*operum omnium dictu maximum suffossis montibus atque urbe pensili subterque navigatæ,*” which were both in the line of streets and under the foundation of houses, and so large that immense waggon loads of hay easily passed through them; the catacombs of Naples and Paris, and the lately suggested subways for enclosing the sewers and water and gas pipes through the metropolis, and superseding the necessity of opening and interrupting the streets in future, the Tunnel for the canal un-

der the town of Islington, and various other works of art, might also be cited as each affording an ample corroboration of our assertion ; but in the tunnel under the town of Liverpool, for the Manchester railway there, may at the present day be seen the most striking illustration ; for that Tunnel not only passes diagonally under the houses and streets of a populous district, but, being of only one arch, it is an excavation of nearly double the extent, and must have been attended with greater hazard, if any than that now proposed. Any one indeed, who will satisfy himself of what has been done elsewhere, or who will examine the section, metals, and mode of operation, will be satisfied of there being as little or less danger from the Tunnel as from an ordinary common sewer.

With regard to the effects from the work after it is finished, the whole operations are so completely and effectually under ground, from one end of Blythswood estate to the other, that nothing whatever can be seen, heard, or felt there ; there will not be even an outlet for air or light along the whole course, from the north side of Garnet-hill to the south side of Argyle-street. The ventilation will be entirely from the extremities, and the light from gas, and the super-stratum impenetrable to noise ; and the noise from wagons moving even on an open Railway, is infinitely less than that from an ordinary cart moving on a common causey.

Every inhabitant of Buchanan-street experiences the excessively disagreeable din resulting from the noise of the Broomielaw and Port-Dundas carts ; and this mischief, indeed, extends to every street where there is any cartage, and it is remarkable to observe, that whenever a street is repaired or new causeyed, it is immediately beset and used by carts, until many of the inhabitants are almost induced to wish for the destruction of their causey, to be relieved from the nuisance. Buchanan-street, and the other streets frequented by Broomielaw carts, are also accordingly a great deal more expensive to the statute labour trustees than the others.

But the proposed measure, while it will concentrate most of this cartage beneath the Tunnel, and thereby relieve these streets, will cause noise or inconvenience to no other, from the smooth nature of the surface on which the carriages will roll, and the great depth of cover under which they will pass.

And on the other hand, although the fears along the line of the Tunnel might reasonably be expected to give their assent to a measure of such benefit to the public, where none of the property within their own occupation will be taken or injured, yet they will receive a direct and immediate advantage, from the Tunnel Co. maintaining, as they propose to do, the whole street or surface of the carriage-way over the Tunnel, northwards to the Woodside road.

The author gravely asserts, that there will be perpetual danger to passengers across the line from the quick descent of waggons, and the slope of the Railway, the section and plan of which he also alleges the promoters endeavoured to conceal. The last allegation may be hardly worth noticing; it is so well known that Parliament makes ample provision, in this respect, by the depositions of both the plan and section on prescribed scales with the Justice of Peace Clerk. Neither need we complain much about the unfair way the author at one time sets forth the total descent of 160 feet on a distance of two miles, and assumes the average inclination as that to be adopted at crossing the public roads, aware, as he must have been, that, for the sake of the Railway itself, the levels at crossing another road would necessarily be the extreme, not the *average* inclination, and while, at another time, to suit his purpose, he assumes the *extreme*, and asserts that some roads will be converted into inclined planes. According to the plans where the surface of any public road is crossed, the rails will be laid nearly on a level, or another and equally commodious road afforded. The assertion, that "no passenger could be safe from utter de-

struction" from the previously acquired impetus of the waggons, is not only unwarranted by the testimony of any engineer or person acquainted with these matters, but, if it were true, it is most extraordinary that so many turnpike trustees have, in this county of Lanark, allowed Railways to be laid across their roads, both by public companies and individuals, without opposition. Eight miles eastward, at Coatbridge, the great road between Edinburgh and Glasgow, is not only crossed with a bridge at the same point both by the Monkland Canal and the Kirkintilloch Railway, but there are actually a second set of rails crossing the road in the immediate neighbourhood, for the use of the Ballochney and other traders using the Monkland Canal wharfs, on the east side of the same bridge: and what is remarkable, the trustees on this turnpike road have themselves, in their act, the power of laying a third set of rails traversing these, and all along the side of their turnpike road. The trustees of the Glasgow and Ayr road have also permitted Railways at four several places to be carried directly across their great thoroughfares. The trustees on the great roads, executed chiefly at the expense of government in this county, also assented to the Ballochney Railway crossing their road in three several places; and the Ballochney Railway also crosses the great Edinburgh and Glasgow road near Wester Moffat. The parliamentary commissioners on the Lanarkshire roads have given their entire assent to the Coltness Railway crossing their road, and also to being crossed by a private Railway from an extensive Iron work to the Monkland Canal; and the road between Glasgow and Edinburgh by Holytown is crossed by the Woodhall Railway, and the new London road on Woodend Turnpike is crossed twice by private Railways within two miles of Glasgow. These are all instances in our immediate neighbourhood; but if we refer to the Dalkeith, Dundee, or Ardrossan Railways, the Liverpool Railway, or any of those in England, the examples would be without number: yet upon none of

these have we ever heard of almost any accidents at all, and certainly none in proportion to the daily instances occurring from carelessness or haste on common streets; and if there is truth in the assertion of many accidents happening on the Kirkintilloch Railway, we are justified in saying, that these must have arisen from gross carelessness on the part of the drivers, as we have certainly not been able to discover that the Co. have expended much, in compensation to the sufferers. The trade of the Ballochney and Kirkintilloch Railways, it will also be noticed, are exclusively descending,—the trade of that proposed will be an ascending as well as a descending one; so that it is the Co.'s peculiar interest to keep as near a level wherever they can, unless where they must necessarily use inclined planes; and every one acquainted with such matters knows, that a waggon will not move on a Railway, by its own gravity, upon an inclination of less than 1 in 160, and, at any rate, the lever-drag or break puts the waggons almost as completely and instantaneously under the command of the waggoner, whose sole business it is to control their speed and direct their course, as the helm puts a ship in the power of the steersman.

The author also asserts that the Blythwood houses will be enveloped in smoke: this is totally untrue; and if the trade of the Co. be such as hereafter to require the use of fixed engines instead of self-acting machinery on their inclined planes, these must, from the description we have already given of the Tunnel, necessarily be further off from their residences than many now existing. But we need not be surprised at this flash before the smoke has arisen from a writer of the author's poetical cast.

It is impossible to reconcile the just allegation of the author, that the public are gainers by the competition between the Monkland Canal and the Garnkirk Railway, with his recommendation to crush the measure, as having originated from a desire to serve the latter. His reasoning would be

just were the measure to *take away* any convenience or advantage from either of the competitors which such competitor at present possesses ; but, as matters are, it is absurd, and, were the work even exclusively to be undertaken by and for the advantage of one of these, it would still be as much entitled to the public support, and that Co. would so much the more deserve encouragement for conduct so legitimate and enterprising.

The assertion is also untrue, that the Railway proposed by the Monkland Canal Co. in 1824 was abandoned because it did not afford an adequate return for the money expended : the fact speaks for itself ;—the Canal Co. purchased, and have to this day, nearly all the requisite ground, but they found the line impracticable ; and the preamble of their own act of parliament sets forth that a railway communication to the Broomielaw is a desideratum. The tram road already laid along the whole road under the charge of the Port Dundas traders to the head of Buchanan Street, for the use of common carts, also proves the extent of carriage to and from Port Dundas.

The author, in his attempt to prove what he so much desires, that the proposed Railway will not lessen the expense of cartage of coal to the Broomielaw, forgets that the rate of 1s. 2d. mentioned in the Report is at least 20 per cent. below the average price of the last five years, and also the trade that must necessarily arise on opening the Garnkirk Railway ; and further, that, upon his own Railway to Kirkintilloch, coals are actually carried the distance of 10 miles at the rate of 1s. 6d. per waggon. Let these different prices, and the circumstances of the proposed Railway be compared, and the circumstance of the trade being already formed for the latter, and the result would be the probability of fully a greater saving in carriage than what Messrs Grainger and Miller have estimated.

The author is also unfortunate in his allusion to the Darlington Railway charges, in reference to the carriage of coal

