

bia, in two days, with a cargo of flour, which, if the highest toll be exacted from him will cost him with all the expense of carriage added to it, more than 18 cents per barrel. Could his flour reach the same market, in an hour, he would save only the interest on its price for a period of less than two days; and this, if a velocity of 60 miles an hour were attainable for practical use, on a rail road, is precisely the sum which he might afford to pay for the more speedy arrival of the cargo at its destined market. The British authorities all agree, that the relative power of a single horse, moving on a canal and a rail road, is as 3 to 1, when the velocity of his speed does not exceed three miles an hour. Will not the tripple load make up for the greater speed of motion, on the rival rail way.

They say, however, that this superiority disappears, when the force of steam applied to locomotive engines supplies the place of animal labour. And what shall prevent the application of steam, to the boats of a canal, of the width of sixty, and depth of six feet? A depth which may be readily augmented to seven feet when its banks shall have been protected by inner walls.

While these writers have boldly maintained the position, that mechanical genius cannot find a field for useful exercise, in facilitating the navigation of canals, that very genius is industriously at work, to disprove their arguments by stubborn facts; which are worth all the arguments that genius can invent. And suggestions have been made in America, of applying to navigation, as a propelling force, the surplus water of a canal, which could scarcely have entered the conception of the most active genius in a country where such surplus water, if it exists, is applied to a more profitable purpose.

But it is in the greater cost of canals, than rail roads that the chief superiority of the latter, is said to exist.

Here a rail way of one or two tracts, at most, is compared with a canal, having numerous locks, and costly tunnels. Seventy miles, however, of the Erie canal of New York has not a lock nor a tunnel, and could, doubtless, now, be constructed for considerably less than ten thousand dollars a mile; while the laying of the two rail tracks on the same surface would, after the ground had been graduated, cost a much larger sum. And under the eye of these very writers, the Liverpool and Manchester rail road, attests the palpable error of all such comparisons? For a further development