

its extremity. The machine in question has been inspected by a large number of scientific persons, all of whom have been surprized at the reality of this discovery. Steam, in consequence of this discovery, will be almost entirely dethroned, as a motive power. The weight of the Steam Engine with its accessories, its fuel and the space which they occupy, will be replaced by a weight equal to about the one tenth of a single boiler and occupying a space of 13 feet in length by six and a half in width, at the most, for machines of great power.

By establishing the River Trade in the way before mentioned, the Canadian Farmer will save the value of the export duty on his produce, now paid to the United States, which may be computed as follows: say, that the whole of the surplus produce, of grain, grown annually in Canada, makes, in value, a sum equal to four and a half millions of bushels of wheat at 4s. per bushel £900,000, on this £20 per cent will give £180,000 per annum, thus, by directing the trade to the lower ports, and keeping the money so saved amongst us, would in addition to the carrying trade, give annually increasing employment to 4,000 families of mechanics and laborers, the reproduction of whose united labor would revive trade, and quickly make a visible alteration in the social condition of the country, and give us some encouragement as a nucleus in proceeding with our infant manufactures.

The political economists at home seem afraid of an over population, and place population against food, but, our position is quite the reverse, for we in Canada, may boldly offer food against population.

The powerful influence of manufactures in increasing the population and wealth of a country is too certain and obvious to admit of doubt. They not only afford direct subsistence, and the means of attaining to affluence to an immense number of individuals, but they act powerfully and beneficially on the agricultural and other classes; supplying them with an infinite variety of useful and necessary accommodations at a low price.

A flourishing agriculture, greatly depends, in fact, upon flourishing manufactures.

The effects of Rail Roads on the prosperity of a country will be numerous, and will, no doubt, quickly be the cause of a large tillage of land, and a variety of other improvements; but the Rail Road will not enable the farmer to grow one bushel of wheat more upon an acre, therefore we must keep up our industrious habits, and keep pace with the changes expected by these new modes of communication, and it should be

remembered that the Rail Roads about to be constructed by the Government of Canada, will be done by capital borrowed for the occasion upon the credit of the Province; and as four-fifths of the inhabitants of this country will always be composed of the cultivators of the soil, the burden of paying interest on the Provincial debt will in that proportion fall upon the agriculturist, consequently great care must be taken in time to prevent any ruinous Rail Road scheme being undertaken. And none should be countenanced by the people except such as will facilitate the internal improvement of the country. Our credit at present is good, and no expensive scheme should be taken to injure it. On the other hand borrowing money for Railroads to run through our own country to the ocean, ports of Montreal and Quebec, or other proper internal improvements, will, by judicious management, prove in the end very advantageous in developing the vast latent resources of this great Province.

Notwithstanding the money being borrowed it may be asserted that the most productive power of man's hand, and of human wealth, particularly in a new country like ours, is a wholesome improving state of National credit. The power of credit upon our prosperity is greater than the steam engine itself, its effect (by strictly paying the interest on our Provincial debt and liabilities, with a fair aspect of liquidating the principal by a Sinking Fund,) can only be tested to advantage by the soundness of our Currency and Banking system; these with prudent management and honest economy, in every department of the government, will operate as a lever in advancing the social prosperity of our community by giving a wonderful stimulus to our Agricultural and Commercial industry.

#### DRAINING.

The question of draining our heavy lands is too important to remain without notice, on this occasion.

On arable land, all surplus water more than sufficient for the benefit of the growing crop, should have the means of escaping into drains by quick percolation. Moisture above the quantity required for vegetation, is injurious both to the soil and the crop. The soil becomes sodden and sour, and robbed of its fertility, and the roots stunted in growth for want of draining; no doubt but a superabundance of wet remaining on lands tilled to fall wheat, is often the cause of killing the crop, when the spring frost has been supposed to be the cause of the injury.

The best mode of draining practised in Great Britain, is with pipe or tile drains; but in our