

four inches on each lot. Its speed is rapid, and in many places exceeds two feet per second. The two streams together form an average fall of 12 feet on each of the 27 upper lots through the township, with a motive power one-fifth greater than that at St. Catherine's.

Vaughan possesses nearly half the head and fall of the whole Humber river. Three-eighths of its water-power still remain unoccupied, for the future extension of the Vaughan trade, should fresh facilities encourage it.

The Humber water-power has no very precipitous or conspicuous fall, like that of the Genesee at Rochester; situated in the rear or western part of the township, conflicting interests have led many to form an erroneous opinion, and to undervalue the true worth of this noble river to the people of that township.

There are eight water privileges (seven in use) centred within one mile of the village of Burwick, containing in all 97 feet fall; to this point the track of a northern railroad might be made available as a portion of a western track leading through Chinguacousy, Esqueaux, &c. and either intersecting the Great Western, at Paris, or some other point, or pursuing a more northerly course through the interior range of townships to the westward.

At Weston village, the Humber, with the volume of its waters increased by the junction of its west branch, has 47 feet fall fully occupied.

The water-power near the 7th concession of Vaughan, furnished by these two nearly parallel streams, is equal to 1,950 horse power, working continually the 24 hours, and rates 1 and 9-16ths horses to each male adult in the township; while the living horses, according to the census of 1850, rated scarcely 15-16ths of one horse to each male adult in the then district, and whose capacity to work extends to but 10 hours per diem.

The Humber will in time complete its first or forest work, and then other employment and other materials will supply packages for freight.

The cost of cartage, in 1850, on the Humber productions of flour and lumber, amounted to \$48,349 50c., which productions might doubtless be doubled in quantity by increased facilities for business. There are capacity and water-power also now running to waste sufficient to furnish it. Of the above amount, the sum paid by Vaughan products was \$25,698 69c., being more than one half.

On the Weston Plank Road, three-inch plank has been cut through and completely worn out in a very short period, from the continuous heavy traffic, and is now being replaced with timber.

The estimated tolls, for 1851, at the gate on that road, amount to \$3,000, which averages from 90 to 100 loaded teams daily; 30 of which are employed in carrying firewood to Toronto.

The future productions of the machinery driven by the Humber, Holland and Nottawasaga rivers, together with the grain which must seek them to be ground, sold or exchanged, will eventually build a railroad for

themselves; and the facts and figures already detailed lead to the inevitable conclusion, that unless disturbing causes arrest the present rate of progress, the transit of the articles named will so increase along the line of these rivers, that at no distant period they will yield, in conjunction with the passenger traffic and return freight (not before taken into account), a fair remuneration for the capital necessary to construct a railroad parallel to their course.

A brief synopsis of the Water Powers situated north of Toronto.

	Head and fall of stream.	Its capacity in 24 hours engines, working 12 hours a day
River Severn, Simcoe county	170	200
River Nottawasaga, Simcoe county ..	170	140
Holland River, west branch, county York	40	24
Main Humber, in Albion, county York estimated	60	90
Humber in part of King, Vaughan and York	868	338
	1308	738

About 4-7ths of this water-power is situated in the interior townships, viz., Vaughan, King, Tecumseth and Essa.

They may all be made to pay tribute to the Northern Railroad, and add exceedingly to the commercial interests of Toronto. There is no other water-power in so small a space, equally employed, in West Canada, to be compared with it; the unemployed Niagara alone excepted.

	Head and fall of stream.	Capacity in 24 hours engines.
The St. Catherine's water power, on the whole length of the Welland Canal, is equal to	334	160
The Genesee river, at Rochester, has 260 feet fall; but of this two-thirds, or 170 feet, are unavailable. The amount occupied is	90	274
- This water-power propels 110 run of stones, able to make 5,000 barrels of flour a day; besides other machinery; and the people appreciate its value, from an ocular demonstration of its work daily, in various branches of industry.		
The Shaws Water Works, at Greenock (Clyde), Scotland, constructed at a very great expense, have	512	175

The Shaws Water Works have banks made 60 feet high, and the reservoir will contain 310,000,000 of cubic feet of water, and covers nearly 400 imperial acres. They supply 2,400 cubic feet of water per minute (the same as the east Humber, in Vaughan). Notwithstanding