

He himself had paid \$15 for the making of a coat, and therefore he was able to express an opinion on the subject. (Laughter.) There is also abundance of room for shoemakers and plenty of work for tinsmiths. The lecturer then passed to the subject of the land. He believed he would yet live, if God spared his life for the allotted three score years and ten, to see the commerce of Asia passing through the fertile belt, (the valley of the Saskatchewan.) It contained ten millions of acres. Then there is the Swan River District, which Professor Hind, of Toronto, says is the most beautiful country any one could conceive, and which he thinks could not be surpassed in nature. Some American gentlemen, bankers and capitalists, had travelled all through the North-West last year, and they had given it as their opinion that if Uncle Sam could get hold of it, it would be the making of him. (Cheers.) But they would take care not to let him. (cheers.) He trusted that the wholesale men of Hamilton would not lose sight of the Saskatchewan and Assiniboine valleys. Already they were sending large quantities of goods to the North-west, and he hoped they would reap a rich harvest, for a more liberal and kind-hearted lot of gentleman he had never had the pleasure of being acquainted with. (cheers.) He trusted that a thoroughly British population would people the North-west, and that right speedily, too. Thousands of British subjects were every year moving into the United States and settling there, because they could get land there that would give them a crop the first year without the labor of felling trees. We wanted all the bone and muscle for ourselves, instead of furnishing it to Uncle Sam, and he saw no reason why we should not get it, when we could offer a superior soil to the farmer. (cheers).

The speaker next referred to the coal beds of the Saskatchewan, describing their extent and richness in glowing terms. These coal beds appeared to him to be reproaching the nation for neglecting them so long. They were peeping out of the earth in astonishment at the carelessness of the people in not opening them up. He had a theory of his own concerning the history of these coal beds, which he briefly sketched; and he felt that the day would come when they would be furnishing heat and comfort to tens of thousands of people inhabiting the vast country of the North-west. In concluding his lecture the Ven. Archdeacon briefly explained his object in visiting Ontario—to raise the necessary funds for the endowment of a collegiate institute at the town of Winnipeg, which, while being a credit to the country, would afford to the youth of the new Province the means of obtaining a first-class education. He referred to some of the dangers which had to be guarded against and the difficulties to be overcome in providing educational facilities for a new country like Manitoba. The main objects of the institution for which he was soliciting aid were three in number; 1st. to provide for the proper training of clergymen of the Church of England to minister to the spiritual wants of the inflowing population belonging to that denomination. 2nd. To provide for the training of the Indian youths, who would, in time, go forth as teachers to their own people. There were some four or five of these youths at present in the college, and it was interesting to see the progress they were making. 3rd. To give good, sound education to the young men of the country, without distinc-

tion as to sect, creed or nationality (applause). Until lately the Presbyterians of that section had been availing themselves of the advantages which this college afforded, one of the students being a son of the Rev Mr. Black, senior Presbyterian clergyman in the territory. He paid a high tribute to the worth of this minister, who, in a speech after one of the college examinations, expressed himself as highly pleased with its management, and as glad to find that the sons of Presbyterians were treated in every respect as well as though they belonged to the Church of England. He hoped the audience would contribute as liberally as possible to so worthy an object. The venerated gentleman then took his seat, loudly applauded.

Gentlemen then passed around and took up a collection, which was found to amount to \$56.75.

Resolutions of thanks were then moved to the lecturer and the chairman, after which the audience gave three cheers for the Queen, three for the venerable Archdeacon, and then separated.

Its and Man factures.

THE WIDTH OF THE RIM OF WHEELS.

A load on wheels with wide rims will run much easier on the soft track, than if the rims were narrow, provided the rims do not sink into the mud or dirt so far that it will close over the felloes. But where the track is not soft wheels with narrow rims are much the best. Wheels with a six or eight inch rim, for going on meadows, where the ground, is rather soft, or on ploughed ground, would enable a team to take a much larger load than if the rims were narrow. But when wheels with such rims come where both narrow and wide rims sink in very much, wheels with narrow rims would be infinitely better. The wider the rims of wheels are, the heavier they must be made, and the wheels should be as light as is consistent with strength and the purpose for which the waggon is to be used.

Some men will say, "Let me have a wheel the felloes of which are two inches wide, and one and a half inches deep, with a tire three-fourths of an inch thick." But this often makes a needlessly heavy wheel, and no stronger than if the felloes were one and three-fourths of an inch wide, and two and one-fourth inches deep, with tire half an inch in thickness, which is thick enough for ordinary purposes. There is no good reason why the wheels of a common waggon should weigh from thirty to forty pounds each more than other wheels of the same strength.

Wheels are often made with a smaller number of spokes than there ought to be, because the hub is sometimes too small to receive more, and sometimes to avoid the labour of making them. There is a regular rule for determining the number of spokes in a waggon wheel, which is regulated by the diameter of a wheel. The greater the diameter of a wheel the larger must be the hub and the number of spokes in it. The spokes, where they enter the felloes should be from seven to ten inches apart—never more than ten inches. The forward wheels of ordinary waggons have twelve spokes; they should never be made with less; and the hind wheels fourteen and sometimes sixteen. Wheels usually have even numbers of spokes, but when the joints of the felloes are on the tenons of the spokes, or when bent felloes are employed, the number of spokes may be odd.