

VIRDEN, MAN.

We give this week a number of illustrations of the town of Virden, Manitoba. Virden is one of the progressive towns of Western Manitoba. It is situated on the main line of the Canadian Pacific railway, 180 miles west of Winnipeg, and is the third largest town on this line of railway within the province of Manitoba.

Incandescent Mantles.

Professor Chandler, of Columbia University, New York, in the course of the annual address which he delivered recently as president of the Society of Chemical Industry, before that body, said of modern lighting device:

The efficiency of gas lighting has been wonderfully increased by the introduction of the incandescent mantle invented by Auer von Welsbach. By

extremely rare earths, and I remember Professor Woehler placed in my hands, in 1851, a few grammes of thorite from Sweden, from which I prepared thorium.

When Welsbach began his experiments upon thorium, it seemed impossible to procure anywhere in the world a sufficient supply of this material so as to make it available for use in the arts; but as soon as a demand was created, nature responded, and vast quantities of monazite, containing 5 to 6 per cent. of thorium, and much larger quantities of ceria, have been since discovered."

THE IMPLEMENT TRADE.

FEW SUCCESSFUL AUTOMOBILES.

Failures among automobile manufacturers, considering the total number of concerns engaged in the line, are numerous. Discussing this trade recently, a man who was connected with one of the companies that gave up the struggle said that up to this time a majority of motor vehicles put out had been thrown back on the makers' hands because of the imperfections. In other words, comparatively few automobiles could be called a success. Most of the sales carry with them a guaranty that the vehicles have been unable to fill. Buyers demand the broadest kind of a warranty as to just what the vehicles will do and how they will do it. Manufacturers, anxious to get their products in the hands of users, have carelessly promised more than the capabilities of the machines justified.

IMPLEMENT TRADE NOTES.

Implement dealers in Eastern Canada will likely meet in January next and form an association.

The display of agricultural machinery at the Toronto exhibition was the smallest on record. The manufacturers signed an agreement last spring to keep away from all exhibitions, which accounts for the falling off. This agreement is likely to be made permanent. It is due to dissatisfaction with the treatment they have had in the past.

Eastern sleigh manufacturers have made very few sleighs for western trade this year under the belief that the stocks on hand left over from last year would be nearly sufficient for all requirements. The wisdom of this course is now manifest as the poor wheat crop will lead many farmers to make the old sleighs do another year.

The associated manufacturers of farm and garden tools of the United States recently held a meeting, at which they announced that for the coming season list prices and base discounts would remain the same as for the year just ended with the single exception of header and grain or barley forks, the prices on which are new, as follows: Header forks, 4-tine, 13 to 16 inches, 66 2-3 per cent.; grain or barley forks, 4 or 5-tine, 16 to 20 inches, 70 and 6 per cent. off. These are the prices to the retail trade.

Railway and Traffic Notes.

C. P. R. traffic receipts for the week ending Sept. 21 were \$606,000; for the same week last year, \$601,000.



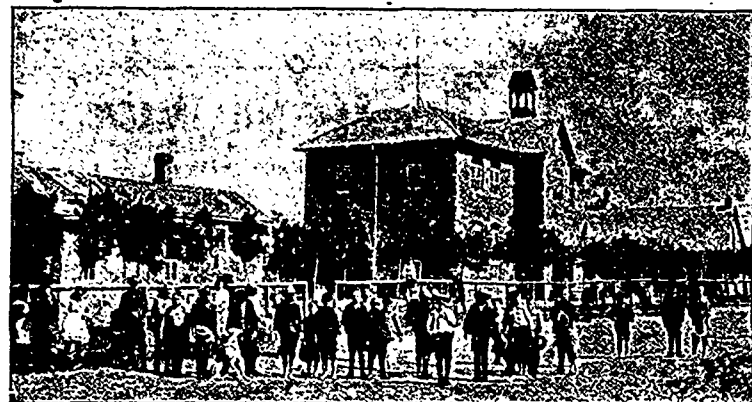
Grain Elevators at Virden, Man.

Virden is situated in a splendid grain-growing and stock-raising district, and practically from these agricultural industries alone the town derives its business. The row of grain elevators shown in one of the illustrations, is alone sufficient to indicate the importance of the place as a grain market. A town that maintains half a dozen or so of grain elevators and a good flour mill is bound to have a considerable grain trade.

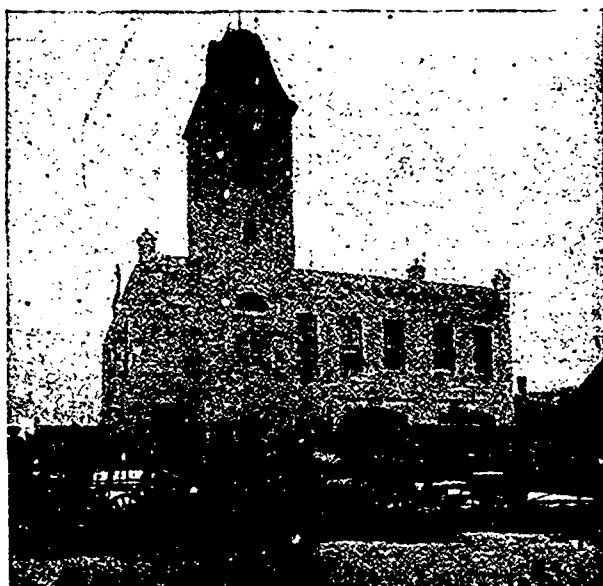
Virden is well supplied with schools, churches, banks, newspapers, and all other requisites which go to fill the wants of an enterprising and progressive community, such as is here found gathered together. The illustrations given in this issue of The Commercial will indicate to some extent what has been accomplished in this young western town in providing school and other public buildings and business premises. The illustrations were kind

the use of this beautiful device the light-giving power of gas has been increased enormously. Water gas, which in the old-fashioned burners of the best kind, yielded an illuminating power of five candle per foot of gas consumed, yields with the Welsbach mantle from 15 to 20 candle-power, and with the improved mantles now being manufactured by the Welsbach Company, at Gloucester nearly 25 candles per cubic foot of gas consumed.

I had occasion recently to test one of the new mantles taken from the regular stock, and with a consumption of 5 feet of gas I obtained 122.5 candle power, or 24.5 candle-power per foot of gas consumed. This great increase in the light produced by the incandescent mantle is due to Welsbach's latest discovery of the fact that the greatest amount of light can be obtained when the mantle consists of from 98 to 99 per cent. of thorium, which by itself emits little light, but has the advantage of making the toughest and most durable mantle, and from 1 to 2 per cent. of ceria, which in combination with the thorium exhibits the greatest light-giving power. The introduction



Public School, Virden, Man.



Municipal Building, Virden, Man.

In many cases where vehicles were returned after a brief and unsatisfactory trial, it was found to be cheaper to construct entirely new machines rather than remedy the defects in the old. This resulted in a waste of large quantities of material, and notwithstanding the enormous prices obtained for the vehicles, the losses have eaten up the capital and caused the manufacturers to close their plants.

There are, of course, a few successful machines built, but they are the exception rather than the rule. Our informant advances the opinion that the best working and most satisfactory automobiles thus far manufactured are those designed for heavy traffic, such as truck wagons, omnibuses, etc. One would naturally suppose that the smaller and lighter jobs, such as buggies and phaetons, would have advanced nearer the stage of perfection. At least it would seem reasonable that the vehicles carrying the lightest loads would be more apt to fill expectations. That this is not the case may be attributed to the greater capability of heavier motors. To avoid weight the motors on light jobs have been rendered unequal to their task.

The automobile situation as yet presents little menace to the general trade in light vehicles and none to the medium grade vehicle business. Rumors of light single-seated automobiles to be sold at \$200 to \$300 are occasionally heard, but the absurdity of these reports may be judged from the fact that it now requires from \$1,500 to \$2,000 to gain possession of that kind of an automobile having a record in its favor. Even the three-wheeled freaks we see occasionally cost \$600 to \$700. As far as the country vehicle trade is concerned it has nothing to fear from the automobile for many, many years to come.—Implement Age.

The Canadian Northern railway, has now been completed to a point within three miles of the northern boundary of Manitoba, while the grading has been completed as far as the Carrot river, and the work will be pushed forward until the winter sets in.

The Belmont-Hartney extension of the Northern Pacific is now completed as far as Hartney, the first train having passed over the line to the latter point on Saturday last. Seven miles of the road have been constructed this year. Work on the Lake Manitoba spur of the Northern Pacific will now be pushed rapidly forward. The entire work, it is expected, will be completed in about two weeks.

The work of grading the new railway from West Selkirk to Whitewood, on Lake Winnipeg, will be commenced on Monday J. A. McArthur has been awarded the contract for the work, and he has let sub-contracts as follows: For the first two miles to A. C. Smith, for the next four to J. W. Buchanan, and for the next two to McCrimmon. The balance of the work, a great deal of which is through swamp lands, will be done under McArthur's own supervision. When the road is completed the distance from Winnipeg to Lake Winnipeg by rail will be about 40 miles.

The first number of the Dominion of Canada Labor Gazette, published by the department of labor, was issued on Tuesday from the government printing bureau. It will be issued monthly and printed in both English and French. The purpose is the dissemination of statistical and other information relating to labor conditions and kindred subjects, and the matter is intended to be of service to workmen and others desiring data in regard to questions affecting labor. The Gazette is an official publication.

ly supplied to The Commercial by the publisher of the Virden Advance, a weekly journal which is one of the institutions of the place.

of thorium and ceria into the affairs of everyday life is a very striking illustration of the advance of modern chemistry. In my student days ceria, and particularly thorium, were regarded as