

Teacher and Scholar.

The public school, its associations and improvement are subjects of growing interest and vital concern to every farmer's family in the West. We should be pleased to receive concise communications of a helpful and suggestive nature for this department of the "Farmer's Advocate" from those interested.

Primary Number Work.

There is too much "again and again" in number work still in use in our public schools. It is much better than it was twenty, yes, even ten years ago. Teachers have learned that children are not mere machines who turn out so many words a minute. They have brains—at least the vast majority of them have—and they should not be treated as though they were devoid of them. It is necessary to use objects in early primary work, because children, in early stages, have no idea of the abstract apart from the concrete. In the beginning of number work, I teach (1) numbers up to ten, giving them the idea of quantity, and have them pick out ten splints, blocks, seeds or whatever objects are used, until they can show me any number of objects up to ten. I make pictures of them, e. g., in teaching the quantity five. I have them pick out five blocks, splints, etc., and I make pictures of five cars in a train, or five trees, five apples, five birds, or anything like that, always using colored chalk. Then, when they know the numbers up to ten take them up to 100, showing them twenty means two bundles of ten splints, or two boxes of blocks, and twenty-four means two bundles of ten and four in addition, and so on. With numbers up to 100, I always use the picture numbers, but above it I do not, to any extent. When they can count to 100, and know the numbers, also being able to make the figures, commence the combinations. In teaching these, I always tell them stories, e. g., to teach $2+1=3$. I have two oranges and Willie gave me one more, how many would I have? I have seeds, blocks, pegs, rings, etc., to show the story too. Then I have the children tell me stories also to further impress it. Then I place on the blackboard the picture number of $2+1=3$ * * * * * = * * *, using dots, stars, trees, circles, etc., and placing the figures under the pictures. I have them make these on their slates, and then with objects. Then, when we teach that 2 (anything) + 1 makes 3, I have pieces of pasteboard with figures on and the + signs; these the children use to make the tables. I let the children design pictures to represent the numbers, and it is surprising what beautiful designs they make out of the seeds and pegs.

ELSIE M. CAMPBELL.
Moosomin.

Farm Life in Manitoba.

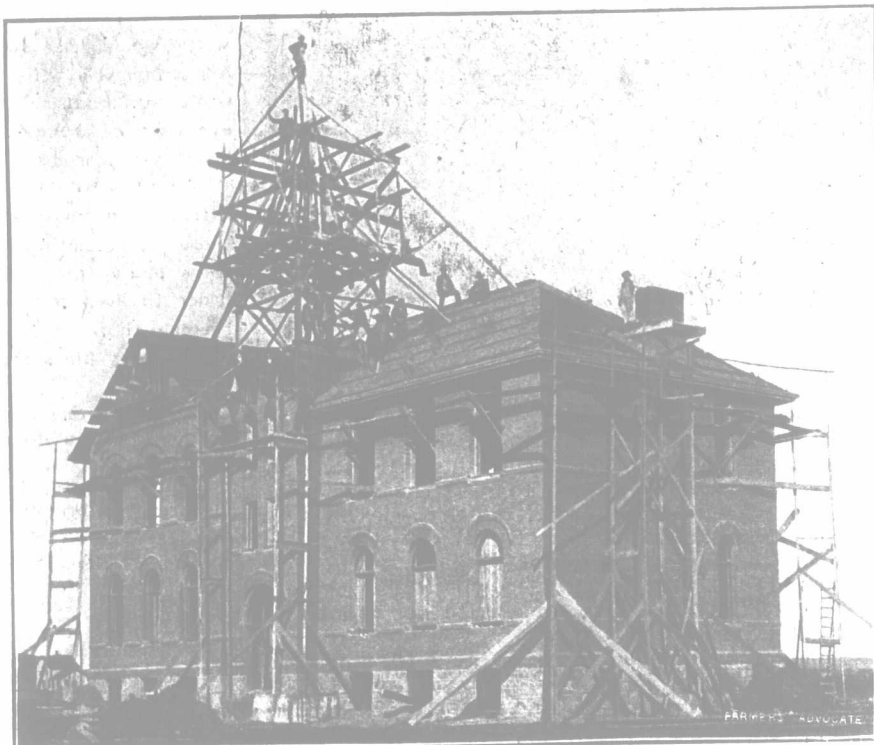
I was born in Manitoba thirteen years ago, and have lived in a farming district all my life. Some farmers are very successful, while others are not. Farming, as I have been able to judge, is a very independent and pleasant life. The farmer is busy all the year around. He tries to do as much plowing in the fall as he possibly can. Then in the spring he harrows the land ready for the grain, which he either sows broadcast or with a drill. If he is fortunate enough to get the June rains, the farmer is pretty sure of a good crop. From the middle of May to the middle of June, he plants his root crops, which require great attention in the way of weeding and hoeing. The farmer generally starts haying in July, and continues till the harvest is ready, some time in August. This is the busiest time of the year. The farmer has to cut his ripened crops. Then in two or three weeks it has to be stacked. After the threshing, the grain is either hauled to the elevators or stored in the farmer's granary. The root crop or garden produce next occupies the farmer's attention. The potatoes are marketed, and the roots are stored away for the winter-feeding of cows and pigs. In the winter the farmer gets his wood home for the next summer's use, and generally cuts and piles it up. He can also haul his grain to market. The stable work in the winter is much more than in the summer; but, on the whole, the farmer has lots of spare time in the winter for amusements.

The above article was written by Starks Chudleigh, born in England, and was in the class at 1850.

Geography.

REVIEW LESSONS ON RIVERS—QUESTIONS.

1. Where is the source of the river?
2. Does it rise from a spring or a lake?
3. In what direction does it flow, and why?
4. What is the character of its mouth?
5. Is there a delta at the mouth?
6. Name rivers that have deltas?
7. Why is the river deeper in some places than in others?
8. What causes rapids?
9. What causes canyons, and give examples?
10. Explain the action of the water in wearing down huge boulders in the bed of the river.
11. Explain the cause of windings in a river, also the change in the location of a river bed.
12. Why are banks higher near the mouth of a river than near the source?
13. Compare the size of rocks carried by the river at different places in its course.
14. Define sediment, alluvial plains silt, rock waste.
15. Define watershed, cataract, rapid, watercourse, ravine, coulee, dyke, levee, wharf, canal.
16. Why are some rivers not affected by dry weather? Give examples.
17. Give the source, direction and distance navigable of the following rivers: Mississippi, Saskatchewan, Red, Mackenzie, Columbia, Missouri, Fraser, Yukon, St. Lawrence, Ottawa, St. Mary.
18. Compare the following rivers as to tributaries, size, discovery, size of cities on its banks, and character of commerce carried on each: Mackenzie, Mississippi, Congo, Ganges, Danube, Thames, Amazon.
19. What is the chief characteristic of each of the following rivers: Connecticut, Saskatchewan, Red, St. Lawrence, Orinoco and La Platta, Nile, Colorado, Mississippi, Hudson, Niagara, Fraser?



SASKATOON PUBLIC SCHOOL IN COURSE OF ERECTION.

20. Which of the above rivers are noted for: cataracts, history, luxurious forests, scenery, pastures, farming lands, canyons, salmon?

21. Name the three principal rivers in each zone. Which ones are in more than one zone?

22. Of what historic importance are the following rivers: Nile, Tigris, Euphrates, Jordan, Red, Ganges, Hudson, Tuegela?

23. What is the chief river in the ocean? Where is: first, its source; second, its mouth?

24. Locate the rivers mentioned by Roberts in "Canadian Streams."

25. What great rivers have overflowed their banks during the past ten years?

26. Why has the width of the Red River doubled during the past twenty-five years?

27. What effect has the cause of this change on the climate of Western Canada?

Mamma (to Dolly, who has been ill)—"My dear, are you feeling better now?"

Dolly—"I don't know, mammy. Is the jelly all gone?"

Mamma—"Yes, dear."

Dolly—"Well, then, I think I am well enough to get up now!"

Has it ever struck you that the Farmer's Advocate is doubly valuable because you can keep it? Think of all the papers which you read, then use for wrappers or kindling—then compare your pile of Advocates in the bookcase, ready for you whenever you wish to use them. You would never dream of using a Farmer's Advocate for kindling, except kindling for thought.

School Libraries.

The school library is a necessity, and a school cannot be classed as an efficient school if this important factor in educational work is not provided. One of the best habits which we can inspire a pupil to acquire is the appreciation of good books and a love of reading. Then his education will continue after he leaves school. It is as much the function of a school to teach the child how to gain information from books, and to cultivate his taste and powers of discrimination, as it is to teach him how to read or write. The ability to read will be of little service to him if it does not enable him to widen his horizon, multiply his ideas, arouse ambition, strengthen his conscience, and stimulate him to a fuller life.

The literature which a people reads determines the morals of the nation. Their reading is a true index to their love of liberty, truth, purity, patriotism, patience and reverence; hence, it is the duty of the State to encourage all school districts to maintain suitable libraries.

The report of the Education Department of Manitoba for the year 1902 is an exhaustive review of educational progress for the year, but little information regarding rural school libraries is given, probably for the reason that but little could be given, the libraries in most rural schools being of rather a nondescript character. There is no denying the fact that the question of providing suitable libraries for rural schools is a very puzzling one. In Ontario the Government, by giving each school board one dollar to expend in books for each dollar furnished by the trustees, is doing much to increase the number of books in the schools of that Province. Still, thousands of school trustees are asleep to these advantages, and even were they awake to the opportunity offered, but little provision is made for the proper selection of books, and the ones provided are as likely to be a means of degradation as a source of culture. Circulating libraries might be established, if the trustees of the various districts would co-operate with the Government. There are about 1,000 rural schools in the Province, divided into ten inspectorates, of on an average one hundred schools. If each district would provide \$10, either from the proceeds of a concert or out of the school funds, and the Government supplement this sum by an equal amount, \$2,000 would be available in each inspectorate for library purposes. Each inspectorate might be divided into sections of ten schools each, and one hundred boxes large enough to hold 30 or 40 books provided, and in September each school would receive a box of books, which they would keep during the month; at the end of the month School No. 1, in section A, would send their box to School No. 2, and receive in turn the books from No. 10. In this way four or five hundred books would have passed around through each of the ten schools. At the end of June, all the books would be returned to the Inspector's office, and the following year the books which Section A had would go to Section B, while A would get the books which Section J had the previous year, with, of course, their proportion of the new books added during the year. In order that the best books would be purchased, a committee could be appointed at the Annual Teachers' Convention, to act in conjunction with the Inspector in selecting the books.

That there are difficulties in the way of a plan such as we have outlined we are well aware, but we are convinced that the plan is feasible; that little or nothing is being done in the matter of providing libraries, and that something should and must be done; consequently, we will be glad to hear from other teachers who have a plan to offer, or who will make some suggestions.

S. T. NEWTON.

Increase in Salaries.

The abilities that will make a man a success as a teacher will generally make him a success in almost any other line of business. The Winnipeg School Board, appreciating this fact, have raised the salaries in order to retain the services of their experienced teachers.

The new schedule of salaries are as follows: Assistants at the Collegiate and male teachers in charge of schools up to twelve rooms will commence with \$1,200 per annum, and gradually increase to \$1,800 in nine years, the years already spent to count in reckoning the salaries. The salaries of ladies now in charge of schools are: Argyle, \$1,000; Machroy, \$1,000; Albert, \$825; Fort Rouge, \$775; Wellington, \$725. Grade teachers, I. to IV., will commence with \$500 and gradually increase to \$675; Grade V. commence with \$550 and increase to \$675 in ten years; Grade VI., \$575 to \$750; Grade VII., \$600 to \$775; Grade VIII., \$675 to \$850; to be reckoned from date of appointment on staff.

The change from a semi-monthly to a weekly paper will enable us to give more attention to the School Department. Commencing with the new year, we will present a series of practical lessons on nature study by J. B. Wallis, Director of Nature Study for Winnipeg, and another series on physiology by W. J. Sisler. Mr. Sisler has given this branch of education special attention, and his lessons will be interesting and practical.

The Birds.

The appointment of the new year was blowing, with a shiver. A sun-side of a bluff, were comfortably of ceremonies, Chairman, Mr. look the Chairman he was out late.

Mr. Night O very strong, and that he had p meeting with a relations, we he very important uncomfortable it snow is deep, a of our neighbors Sunny South. them, or shall want the opinio do?"

For a time Blackbird began Chickadee that the birds talking.

Mr. English said that he an the yards and o far to fly away Mr. Chairman c to his cousin, words. Mr. G to talk. He a having a hard of the way of t to go to some them that the countries than all winter.

Mr. Robin, now spoke. A received when h ful the berries that winter w the bugs and w and there was that the childr to go for them one of us last we must go to sure to return.

Mr. R. W. fall and was s Crow Blackbird and Mrs. Goph was called on no notion of smartweed, rap

LIQUOR AND

A. McTAGGART
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References as t al standing and by:

Sir W. R. Mor Hon. G. W. R Rev. John Pot Rev. William C Rev. Father T College, To Right Rev. A. S

Dr. McTaggart liquor and tobac inexpensive h m injections; no p business, and a tion or correspon

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THE WEST CO., Limited, phenomenal machines, and overtime to fil separator and farmers are s shrunken whea grain, and a grades at the inferior stuff. This is a sour very much ne how considered agriculturists. Referring to Western trade a bl on their the patronage best in the Canada. See