

largely from other sources than from the soil, and consequently by growing it the soil is made richer in nitrogenous elements.

Prof. Voelcker is one of the strongest advocates for clover in a farm rotation, and gives these as his conclusions upon its value and general character:

1. A good crop of clover removes from the soil more potash, phosphoric acid, lime and other mineral matters, which enter into the composition of the ashes of our cultivated crops, than any other crop usually grown in this country.
2. There is fully three times as much nitrogen in a crop of clover as in the average product of the grain and straw of wheat per acre.
3. Clover is an excellent preparatory crop for wheat.
4. During the growth of clover, a large amount of nitrogenous matter accumulates in the soil.
5. This accumulation, which is greatest in the surface soil, is due to decaying leaves dropped during the growth of clover, and to an abundance of roots, containing when dry, from 1½ to 2 per cent. of nitrogen.
6. The clover roots are stronger and more numerous, and more leaves fall on the ground, when clover is grown for seed, than when it is mown for hay; in consequence, more nitrogen is left after clover seed than after hay.
7. This crop causes a large accumulation of nitrogenous matters, which are gradually changed in the soil to nitrates.
8. Clover not only provides abundance of nitrogenous food, but delivers this food in a readily available form (as nitrates) more gradually and continuously, and with more certainty of good result, than such food can be applied to the land in the shape of nitrogenous spring top-dressings.

#### A GREAT COUNTRY.

Prof. Bell, in a report just published, gives a most interesting account of his explorations in the James' Bay region. He says that round James' Bay, and up the eastern shore of Hudson's Bay, deposits of coal and iron lie closely packed together in seams and veins of surpassing richness. Vast tracts of forest also exist there with deposits of silver, copper and molybdenum. The region, in fact, so Prof. Bell thinks, will be the future Pennsylvania of the North America Continent. The climate, and Mr. Bell has spent thirteen summers and three winters there, is described as milder than that of the North-West. Moosefactory, at the extreme north of the Moose drainage basin, is in latitude 51° 16', the same as the Qu'Appelle valley, and further south than Battleford. Its winters are not colder than those of Manitoba generally, and are warmer than the Athabasca and Peace River countries. The average temperature for the year (50° 8') is higher than that of many parts of the best wheat-growing lands of the North-West, and less than four degrees colder than that of Winnipeg—a difference chiefly perceptible in early spring. The southern part of James' Bay district is further south than Manitoba, and on the same latitude as districts in Quebec, where wheat and even Indian corn are grown every year. The "fertile belt" of the district is a gently undulating plain, with a sandy loam soil, and lies in the same latitude as Winnipeg. If wheat in Manitoba is an assured success every year, it is reasonable to suppose that James' Bay district, with its large area of fertile soil, cannot be without agricultural value. Winter at James' Bay sets in about the middle of November, the ice breaks up in April, and summer begins in the first week in June. The snow-fall rarely exceeds six inches. The summers are slightly cooler than Winnipeg summers, but warmer than those of the North-West. Late frosts are of rare occurrence, and the early frosts are seldom felt before the second week in September.

It is certain that this comparatively unknown land has a mighty future before it. Toronto is

already seeking to obtain a foothold there. Moose Factory is 500 miles north of Toronto, and a scheme is on foot to run a 800 mile branch to the Factory from Callendar on the C. P. R. or a 200 mile branch from near Nepigon.

#### USEFUL FACTS.

##### SOME USEFUL INFORMATION ABOUT LAND IN THE NORTH-WEST.

GOVERNMENT TERMS—TERMS OF HUDSON'S BAY COMPANY—SYNDICATE SECTIONS—TOWNSHIPS AND RANGES.

The following information will be of value to all persons who propose visiting the North-West for the purpose of taking up land:—

The land in the North-West is surveyed into townships, about six miles square, and numbered in regular order northward, from the international line between Canada and the United States, and they lie in ranges which are numbered in regular succession westward of certain north-and-south lines, called "principal meridians," the first being about fourteen miles west of Winnipeg. There are also certain ranges east of the first principal meridian. Each township is subdivided into thirty-six sections of 360 acres each, or one square mile, and numbered as shown on the following diagram:

31	32	33	34	35	36
30	29	28	27	26	25
19	20	21	22	23	24
18	17	16	15	14	13
7	8	9	10	11	12
6	5	4	3	2	1

**Homesteads and Pre-emptions.**—Any one over 18 years of age can homestead 160 acres of Government land free, and pre-emp 160 acres alongside of it for \$2.50 per acre, payable at the end of three years from date of entry, without interest, or as soon as his homestead duties are performed. But he must remain continuously on the homestead for three years, and break or cultivate a fair share of the land, say from ten to fifteen acres, each year on an average—though no quantity is stipulated—and put up a suitable house on it of course. But any kind of a house that suits a man to live in will satisfy the Government. The patent will be issued at the end of three years. A man must go on the land soon after entering for it in the office, but it cannot be taken up or jumped by another party for six months after entry. If a man must leave in case of sickness or any urgent business, he can obtain leave of absence from the land agent in whose district it is located, and his rights will be protected till he returns. After remaining on the land one year, if a man wishes he can pay for the homestead and pre-emption both at the rate of \$2.50 an acre, cash down.

No one can homestead or pre-emp for another, not even his own brother, as such a privilege would be sure to be abused by the horde of speculators with whom the North-West is infested. An entry of \$20 for homestead and pre-emption combined is charged in the land office. A wife cannot, but a widow can homestead land.

**Syndicate Terms.**—The uniform price of the C. P. Railway lands is \$2.50 per acre, payable one-sixth down and the balance in five years, with a rebate of \$1.25 for every acre brought under cultivation within four years. By the new regulations just issued, every settler must cultivate one-eighth of the land he purchases each year.

**Hudson's Bay Company Lands.**—These lands are offered for sale on easy terms of payment. The prices range from \$2.50 (10s.) to \$6 (28s.) per acre, according to location and other circumstances. No settlement duties required.

The terms of payment are: one-eighth of the

price in cash at the time of the sale, and the balance in seven equal annual instalments, with interest at seven per cent. per annum on the amount unpaid.

**Reserves.**—The above provisions shall not apply to lands valuable for town plots, or to coal and other mineral lands, or to stone or marble quarries, or to lands having water-power thereon; and further, shall not, of course, affect sections 11 and 29 in each township, which are public school lands, or sections 8 and 26, which are Hudson's Bay Company's lands.

**Timber for Settlers.**—Homestead settlers, having no timber on their own lands, can purchase wood lots in areas not exceeding twenty acres each, at a uniform rate of \$5 per acre, to be paid in cash.

#### CURRENT NEWS ITEMS.

The West Middlesex Agricultural Society took in \$405 at the gate on show days.

Mr. ROBERT BUCK, of Watsontown, Pa., recently purchased a bull calf from Mr. Fuiler, of the Oaklands Jersey Farm, for which he paid \$600.

MR. ALEX. CRANSTON recently sold the pine on his farm in North Dumfries by tender. The highest tenderer was Mr. James Barton, of Rosville, \$2,710. There are about 480 trees, and the price is considered a good one.

The farmers are very backward with their fall ploughing, owing to the ground being too dry. It is almost impossible to plough clay land. The corn crop is the best for years, and the season has been so favourable that farmers have saved the corn in good shape.

We are informed that ripe blackberries, and also white berries, were picked from bushes in Mr. Geo. Kiug's garden a day or two ago. They were full size, excellent flavour, and in all respects equal to what they would be in the regular season. So says the Berlin News.

In the Montreal market, says the Recorder, Brockville butter is quoted at from 18c. to 20c. per pound, while Morrisburg butter is quoted at from 20c. to 21c. per pound. At one time the Brockville article was considered equal to that of Morrisburg. Our farmers had better look after their laurels.

## CANADIAN FARMING:

AN ENCYCLOPEDIA OF AGRICULTURE BY PRACTICAL FARMERS.

Full Cloth Binding. 436 pp. Nearly Three Hundred Illustrations. Only \$1.50. Worth Double the Money.

The undersigned announces the publication of Vol. I. of the "Ontario Agricultural Commission Report," which is a condensation of the facts as given at full length in the five remaining volumes. In this volume, complete in itself, will be found the results reached by the Commissioners, in fact, in its pages is given, in accessible form and conveniently arranged for ready reference the cream of what is contained in nearly three thousand pages.

A glance at the table of contents will at once show that this book covers a wide range of topics—all of exceeding interest to the farmer, dairyman, live stock dealer, fruit grower, bee keeper, gardener, etc.

The following subjects are treated in detail, viz.:—Fruit culture; forestry and agriculture; insects, injurious and beneficial; insectivorous birds; bee keeping; poultry and eggs; general farming; dairying; horse breeding; salt in connection with agriculture; artificial manures; special crops—including flax, tobacco, beans and sorghum; agricultural education and farm accounts; meteorology; the Muskoka district; diseases of stock; stock laws and minutes of the several meetings of the Commission. The whole forming a work

Indispensable to every Farmer, and which only requires to be seen to be appreciated.

The London "Advertiser," in noticing the book, says:—"So specific are many of the details entered into, that each chapter may almost be considered a text-book or hand-book on the particular subject concerning which it treats. It is profusely illustrated, and the engravings will no doubt be useful in guiding many readers to a clearer comprehension of the text than they would otherwise obtain."

MAILED FREE TO ANY ADDRESS ON RECEIPT OF \$1.50.

#### How to get this Book for a Nominal Price.

CHEAP CLUBBING COMBINATION.

Subscribers to the RURAL CANADIAN paying \$1.50 to an agent, or remitting the same direct to this office, will be entitled to the paper for one year and a copy of CANADIAN FARMING as described above. The paper alone is worth \$1.00 per year. The paper and book are clubbed at this low rate so that our subscription list for the RURAL CANADIAN may in a few weeks be increased to 20,000 names.

AGENTS WANTED everywhere, to make an immediate canvass liberal inducements offered. Apply to

C. BLACKETT ROBINSON,

Publisher.

5 JORDAN STREET, TORONTO.