

## A FOREST DEPARTMENT.

Our readers will be interested in the following extract from the annual report of the Commissioner of Agriculture and Arts, for the Province of Ontario, being part of the report of Mr. Wm. Brown, Professor of Agriculture, and Farm Superintendent of the Ontario Agricultural College and Experimental Farm at Guelph:—

My introductory subject this year is, Our School in relation to the cultivation of Trees in the Province; as, although I have in previous reports endeavored to give some idea of its immense value, no definite suggestions have been made, nor any future work made clear.

The general importance of the subject, and its special application to Canada, is necessarily our first consideration, but it is one that has been recently handled by evidence before the recent Agricultural Commission, that little more is necessary to impress its political standing upon the Government. The great points of trees or no trees, of retained moisture or rapid evaporation, of irregularly or regularly distributed rain fall, of unchecked storms or amelioration, of more or less temperate temperatures, and of the secondary but telling ones of ornament and cropping revenue—all go to make up a chapter of keen interest in our yet but short history as a nation.

Were evidence needed either to convince or stimulate us to action, the fact of what is being done in the conservation and replanting of forests in other countries should awaken both our pride and deep interest, as such lessons are plentiful in India, Australia, and the neighbouring Republic. There, Forestry is a profession and a Governmental department, systematically conducted by able officers, who are liberally supplied, first, in the item of experiments, and then in the establishment of extensive re-clothing of lands chosen by virtue of judgment based upon these and other known facts acquired by experience, or as shown by Nature herself.

When we desire to bring this matter right home to the farmer and his son here, the story takes seven distinct heads:

1. Shelter for crops.
2. Shelter for grazing animals.
3. Shelter for dwellings.
4. Regulation of temperature.
5. Regulation of rainfall.
6. Ornamental purposes; and
7. As a cropping investment.

The area and value of the forest lands of Canada are still of great magnitude;—indeed, of such magnitude that all the reliable information we possess from the brief notes of surveys stands as evidence of our ignorance of its variety, wealth, and extent, because any survey partakes so much of the character of straight-line testing that whole blocks of hundreds of acres of many kinds of our best timber lie untouched and unknown—at least to Government. It is surely within the scope of a reasonable outlay, and not many years' work, that the country should hold one map showing the principal tree crops on every surveyed lot, as well as on every outlined township, district, and limit. While we know intuitively that we are wealthier than we appear to be, it will give us no better standing in the world's market to make a story about it without actual inspection. Besides, when we talk scientifically, as we must do, in respect of forest influences upon many things, our practice goes afoot, it is most material to be thoroughly familiar with the existing condition of our forests as regards first, second, or any subsequent natural growths, and how far they are likely to subserve the ends in view.

The requisite proportion of tree surface to that under agriculture is another of the studies yet little understood by scientists, and cannot, so to speak, be handled practically with any precise measure of reason until further experiments point to safe data; but, from the extreme of over-clearing on the one hand, to that of too much forest on the other, there is safe ground for no delay on the part of any Government. Of course this would bring up the allied point of what parts of the country should be conserved and what parts replanted, subject to the regulation of appropriate positions and adaptability of soil and climate in each particular example.

It should be one of the particular duties of the Professor of Arboriculture to educate the students of this Institution in regard to the suitability of

certain kinds and forms of trees for special purposes—whether for field clumps, shelter belts, road-side shade, neighbourhood of dwellings, or for more extensive planting in addition to the management of them in all their detail from the seed bed, transplanting in the nursery, preparation of land for planting, their annual maintenance, thinnings and their value, enemies to and diseases thereof, to the grazing of replanted lands, and the ultimate realization of the matured crop.

Thus should we be in a position to advise our Legislatures on the great national problem of the special and general conservation and replanting, by which it would be shown that enclosing, draining, regulation of fires, animal trespasses, and supervision stood as items of public expenditure of the first class, so that one of the first of their duties is the establishment of Forest Departments, and the appointment and duties of a Conservator of Forests for each Province.

## THE ELECTRICAL GIRL WHO LIVES AGAIN.

(London (Can.) Advertiser.)

It is now about three years since the *Advertiser* published the story of the Electrical Girl in the township of Romney. The tale passed through nearly all of our exchanges, and occasionally re-appears now. The story in brief was that the girl was so highly charged with electricity that she could not handle any article of steel. She was a veritable magnet, and needles, knives, etc., would cling to any part of her person. The publication excited a good deal of curiosity concerning the girl, and many persons called upon her at her home. Recently she was taken ill, and the local physicians were called in. She described her peculiar sensations. In her knee joints severe pains were felt, shooting at intervals, as though a battery were at work and giving her intermittent shocks. The knee began to swell, and the pains spread to other parts of her body, generally becoming permanent in her joints. All the doctors could do was of very little avail. Occasionally slight relief would be obtained, but in wet or murky weather the pains would redouble in violence. Finally when the doctors had given up treating her, and regarded her simply as a physiological wonder, a tramp called one day at the house. While he was being given a meal he was told about and asked permission to see the girl. He had been a soldier in the Crimean army, and while working in the trenches around St. Petersburg he contracted rheumatism in its most severe form, and noticing that the girl's symptoms agreed with his, he pronounced her to be suffering with rheumatism. The parents of the girl were overjoyed, but were again cast down as they recalled the fact that the doctors said they could do nothing for her. "Why," said the tramp, "do you want to bother the doctors about rheumatism? Get a bottle of St. Jacobs Oil. It cured me, and will cure any case. I know plenty of old soldiers who have been cured of chronic rheumatism by the use of St. Jacobs Oil." The advice was taken, and the so-called Electrical Girl is to-day prepared to add her testimony to the thousands of others who bear witness to the efficacy of the Great German Remedy.

To the Editor of the London (Can.) Advertiser.

DEAR SIR,—As you have given me a good deal of notoriety by writing of me as the Electrical Girl, I thought I would write to tell you of my condition. . . . (Here follows the recital which is summarized above.) My parents obtained a bottle of St. Jacobs Oil, and to its effects I owe the fact that I am now able to walk without pain, and the swellings in the joints have all disappeared.

Yours very truly,  
SUSAN J. HOFFMAN.

## GROUND SHAVINGS.

Our New York correspondent writes regarding the establishment of D. C. Newell & Sons, on Nineteenth Street and Eleventh avenue, where a mill is run for the purpose of grinding shavings for horse bedding, packing, etc. Mr. Newell, who runs the Hudson River Planing-mill, where this rather novel business is carried on, is an old lumberman of 40 years' experience. This gentleman, a few years ago, invented a machine for grinding shavings, and an experimental test produced the most gratifying results, and the

experience after four years' use furnishes an important contrast to the facts before the plan was employed. Instead of paying some five dollars per day for the removal of the shavings, the mill brings in a revenue of from \$30 to \$50 daily. The capacity of the mill is 10 tons per day, and the ground shavings find a ready market at \$8 per ton. The product of the mill however, does not average the number of tons given as the full capacity. There are some 80,000 horses in the city of New York, to say nothing of outside points, and if the use of the shavings for bedding was pushed, there is a wide field for operating. One of the advantages claimed for shavings is the absorption, by the waxy acids, of all odors; hence the shavings are used to some extent as a disinfectant, and decayed matter when covered by them is rendered unoffending. Ground shavings are also used for bedding for cattle and swine, also in stock cars, and are held to be better than sawdust for ice houses.—*Northwestern Lumberman.*

## THE FUEL PROBLEM.

If it be true that the fuel problem has been solved for Dakota, as below affirmed, we may consider it as solved also for the Canadian North-west, in extensive regions of which lignite and coal exist in quantities larger than the public are generally aware of. The St. Paul *Pioneer Press* says:—"General Manager Haupt, of the Northern Pacific, is now satisfied that the fuel problem of Dakota has at last been solved. The feasibility of burning the lignite coal of the Bly Mines has been amply demonstrated. That it can be used for all heating purposes is no longer an equivocal proposition. Superintendent Hobart, of the Dakota division, is testing the coal in a base burner. One day recently, with a high wind and unusually low temperature, the room was perfectly warmed with the consumption of between four and five scuttles of coal in the twenty-four hours. The same amount of the best Pennsylvania coal has often been consumed under like circumstances, showing a saving of at least 65 per cent.; when the difference in cost and weight is taken into account, this is much cheaper than wood."

## Score Another for Cedar.

The cities of St. Paul and Minneapolis are agitating the question of street pavements, and naturally desire to obtain the best material for the purpose. The *Pioneer Press* commissioned a man to visit several cities and inspect different kinds of pavement with a view to ascertain the relative durability of stone, macadam and wood. Pains were taken by this commissioner to obtain the opinion of experienced men in regard to the different kinds of pavement, and the result of the investigation is that cedar blocks are considered the best wherever they have been used. In St. Louis there are over 300 miles of macadam pavement, and it is alleged that it alternates between the most horrible mud in wet weather and the most insufferable dust in dry weather. In many places it was found that macadam pavement was universally condemned.

MR. E. HALL, of Detroit, Mich., is going extensively into lumber operations in the vicinity of Farwell. His intentions are to construct a railway and put in some 300,000,000 feet of logs on the Tobacco river, some four miles south of Farwell. A dam is being constructed for the purpose of floating out the logs. Extensive arrangements are likewise being made through many parts of the Saginaw valley for summer logging.

THE raging Ohio seems to be making an effort to outlive the mad Mississippi in the commotion and destruction it is creating. A large number of rafts of logs have been swept away on the turbid tide, at Cincinnati, and other points. There has also been considerable damage on the Ohio's tributaries.

A DEPUTATION has visited Ottawa in the interests of American manufacturers to oppose the proposal lately made by manufacturers of cooperage materials in the western part of the Province of Ontario in favor of the imposition of an export duty on elm, basswood and red oak bolts, bolt logs and hoop logs.

THE Victoria, B. C., press urges the importance of the Dominion Government immediately reserving the lands and timber adjacent to the southern passes of the Rocky Mountains to prevent them from falling into the hands of the Northern Pacific Railway, which could then create a monopoly in timber, and force the Canada Pacific syndicate to pay enormous prices for timber.

THE *Montreal Times* says that a London Joint Stock Company, with a capital of £100,000, has purchased the Mille Vache property, opposite Rimouski. It consists of 80,000 acres, with a frontage of ten miles on the River St. Lawrence. The company intends to carry on a general lumber and pulp business, and will build wharves, and provide facilities for loading vessels.

It is said that the dock labourers at Oswego have made a rate for unloading lumber by which vessels of 300,000 foot capacity are charged more than vessels of smaller capacity. This will affect only a few vessels, most of which are in Toronto harbor, and it looks as if the discrimination was ill-grounded. It is surely better for the laborers to have a large cargo to work at than a small one.

NOTICE has been given of an application for letters patent for "The Rainy Lake Lumber Company, Limited," with a capital of \$350,000, in hundred dollar shares, and its chief place of business at Winnipeg. The first directors of the company are to be Messrs. Hugh Sutherland, James Robert Sutherland, Henry Norland Ruttan, Peter Johnson Brown, William Buckingham, John Ross and Simon James Dawson.

THE *Northwestern Lumberman* says that a New York firm has cut up 50,000 feet of oak during the past three months for Peter Cooper's glue factory. Frames are made of it upon which the glue is placed for drying. If this strikes the average reader as being a pretty big story, he should bear in mind that the building where the glue is manufactured occupies two acres of ground.

THE *Kingston News* says that there is a great deal of timber to be carried this year—enough to warrant good rates and to make vessels quite independent as far as chartering is concerned. All the vessels that have a stern port will find timber to carry, and at good paying figures, too.

BRIGHT'S DISEASE, DIABETES, KIDNEY, LIVER OR URINARY DISEASE.—Have no fear of any of these diseases if you use Hop Bitters, as they will prevent and cure the worst cases, even when you have been made worse by some great puffing up pretended cures.

"WHAT EVERY ONE SAY MUST BE TRUE."—And every one who has tested its merits speaks warmly in praise of Hagar's Pectoral Balsam as a positive cure for all throat and lung complaints, coughs and colds, sore throat, bronchitis, and incipient consumption.

People have no more right to become dyspeptic, and remain gloomy and miserable, than they have to take poison and commit suicide. If the stomach becomes weak and fails to perform its functions, Burdock Blood Bitters will speedily remedy the trouble.

DYSPEPSIA, that all prevalent disease of civilized life, is always attended with a disordered sympathetic system and bad secretions, and no remedy is better adapted to its cure than Burdock Blood Bitters taken according to special directions found on every bottle.

A POPULAR REMEDY.—Hagar's Pectoral Balsam is one of the most deservedly popular remedies for the cure of coughs, colds, sore throat, asthma, whooping cough, croup, bronchitis, and all pulmonary complaints. For sale by all dealers.

A REAL NECESSITY.—No house should be without a bottle of Hagar's Yellow Oil, in case of accident. There is no preparation offered to suffering humanity that has made so many permanent cures, or relieved so much pain and misery. It is called by some the Good Samaritan, by others the Cure-all, and by the afflicted an Angel of Mercy.

A healthy man never thinks of his stomach. The dyspeptic thinks of nothing else. Indigestion is a constant reminder. The wise man who finds himself suffering will spend a few cents for a bottle of Zepesa, from Brazil, the new and remarkable compound for cleansing and toning the system, for assisting the digestive apparatus and the liver to properly perform their duties in assimilating the food. Get a ten cent sample of Zepesa, the new remedy, of your druggist. A few doses will surprise you.