

saving the buildings. With a few bricks or even stones, and a little lime and sand, any farmer of ordinary talent can construct a secure place to deposit his ashes in some outbuilding or corner of his cellar. In the absence of any better arrangement, it is much safer to put ashes in barrels or boxes in the bottom of a cellar of good depth than in outbuildings, as in the cellar there is less air usually to fan the flame, and more certainty of its being discovered by the smoke, and far less danger of serious damage should the barrel or box be entirely consumed. No person, too negligent to make the necessary provision for his own security in this respect, should ask indemnity of an insurance company for his carelessness.—G. T., in *Maine Farmer*.

THE RIVERS OF THE NORTH-WEST.

The greatness of a country depends largely upon the facilities for internal navigation. Where natural facilities are insufficient, it is found necessary to the prosperity of a country to create artificial channels of communication. As rapidly as directness are the most essential elements of thorough routes, railways and canals are constructed for the purpose of linking distant points together. The great continental roads must be fed from the navigable streams that they cross and the branch lines that run to them. The following table, compiled from official sources from the *Ottawa Times*, shows that our North West territory and British Columbia have 28,000 miles of water way, the greater portion of which is navigable, and running through a country which has been found to be adapted to the growth of wheat.

Nothing can possibly more impress the ordinary reader with the greatness of our western territory than this exhibit of its water courses. When the banks of those streams, 66,000 miles, and the banks of their unenumerated tributaries, are peopled, as they are sure to be at some distant day, our population will entitle us to a place among the great nations of the earth. Every one who has studied physical geography as it relates to the laws of population will readily understand the superior attractions possessed by well watered countries over all others. It has been one great drawback to the prairies of the Western States that water-courses are scarce, and the superiority of our own oceans of grass in this respect is apparent at a glance. It is safe to say that there is no country better watered or more fertile. As soon as the prejudice regarding the climate are dispelled it will be the chosen goal of the European agricultural emigrant. Its prosperity will be hastened by the great railway to be constructed across the continent. Nothing can prevent its becoming one of the noblest seats of empire, because the great Creator Himself has endowed it with the attributes of soil and climate and water-courses that make it a desirable abode for His creatures. The territory is well wooded, differing advantageously in this respect from the prairies to the south. Plenty of navigable water, an abundance of wood, a productive soil, and a climate comparing favorably with that of the best grain-producing regions of the old world, are features that render the future greatness of the country assured.

When we consider this vast country so recently added to our Dominion, and realize the elements of grandeur it contains, we are more impressed than ever with the absolute necessity that exists for the building of a through line of railway across the whole extent. This will be followed by the placing of steamers on the rivers and lakes of the interior—indeed some have already been brought into use there. A numerous fleet will be required for the purpose of inland trade in a few years. The vast grain crop will have to be transported to the railway, and carried by it to the ocean for transportation to foreign countries in Canadian ships. We are painting no imaginary picture. Circumstances are such that no other result is possible. With the elements of greatness and the disposition to develop them, nothing can prevent our advancement.

ORCHARD GRASS.—A correspondent of the *German Town Telegraph* says of orchard grass: "I have no doubt but that many, perhaps the majority of those who try it, will be disappointed with it. It matures about four weeks earlier than timothy, and our people who are not used to cutting hay in May or June will let it stand till it gets hard, and thus lose much of the value of the first crop, and diminish the quantity of the next. But if cut very early and well cured, and the next crops of rowen are cut and cured in season, it will produce more value of feed for a winter dairy, than any grass I ever raised. I have this winter been feeding three crops of it, grown from seed sowed the 11th of last April. It was cut July 1st, August 1st to 7th, and September 13th, and produced over three tons to the acre. The stoutest of the first crop weighed over two tons to the acre, by actual trial of measured sample."

LABOR CONDUCTIVE TO LONG LIFE.

In view of the short duration in life entailed by some occupations, it must be regarded as a consoling, yea, a sublime fact, that labor in general does not tend to shorten life, but, on the contrary, by strengthening health, makes life longer; while, on the other hand, idleness and luxury are productive of the same results as the most unhealthy occupation. Dr. Guy, an Englishman, in calculating the average duration of life among the wealthy classes, arrived at the very surprising result, with regard to adults, that the higher their position in the social scale, the more unlimited their means, the less also the probability of a long life. We have been so long accustomed to consider the possession of riches as the best guarantee for physical welfare that many will be surprised to hear from Guy that "the probability of the duration of life lessens, with regard to the adults of each class of the population, in the same degree as the beneficial impulse for occupation is lacking. If a person, who for a long time has lived an active life, retires from business, it may be taken for granted, with a probability of ten to one, that he has taken the most effective means to shorten his life." We may smile at the soap-maker, who, after having formally retired from business, went, nevertheless, on each day of soap-boiling to his workshop; but it must also be acknowledged that his instinct did not mislead him. Of all conditions of life, idleness is hardest for nature to combat; and this is especially true of persons who have accustomed themselves to a busy life.

SPRAINS AND BRUISES.

These injuries are sometimes very distressing and their consequences very serious. The dense ligaments and synovial membranes of the joints swell, and sometimes inflame as the result of local injuries, and the pain is often extreme. But simple water is all the treatment necessary in any case. It should, however, be of a temperature adapted to the circumstances, the indication being to unload the congested vessels of the injured part as much as possible. If the part is hot and painful, apply cold water or cold wet cloths, frequently renewed, until the heat becomes normal. If there is pain or tenderness without increased heat, apply fomentations until the pain is relieved. All the after dosing required in either case is a wet cloth covered with a dry one, and worn until all tenderness is gone. This simple treatment will do all that any medication can do, and is better than all the liniments and lotions, plasters and poultices, that were ever invented.—*From the Science of Health*.

HERBAL SUPERSTITIONS.

A firm belief in the occult powers of the flowers, herbs of the field, and the trees of the forest, was once a popular superstition in Europe, and even at one time had its learned professors. "The most popular system," says *Chambers' Journal*, "was of course intimately connected with astrology." Every plant was supposed to be under the influence of a planet; and each planet reigned paramount over a certain part of the human frame; hence the herbs under its influence were believed to supply the proper medicine for all diseases of that portion of the body. Another method of detecting the virtues of the plants was by "signature," and was founded on the idea that "Nature has stamped on divers plants legible characters, to discover their uses." To yellow flowers were held the natural flowers for the relief of yellow jaundice; spotted herbs were distilled for the removal of freckles; and the tooth-like shape of henbane seed was sufficient proof that the juice would cure the toothache. The medicinal properties attributed to some plants by the herbalists are indeed astonishing. According to an old work on this subject, "eye-bright wine" will not only enable old people to read without spectacles, but has been known to restore sight to the blind; valerian juice draws iron or wood out of the flesh; cowslip water restores faded beauty, and a single spoonful of the juice of the mallow is a preservative forever from all diseases! Rue renders a man subtle, quick and inventive; sage strengthens the memory, and rejoices in so many virtues that one of its panegyrists asks, "How is it that one who grows sage in his garden can ever die?"

Some curious recipes were furnished by these old inhabitants. There is one,

never in much demand, we should think—"good against merrie maids," and another "to kill a man in such a sort as though he seemed to die laughing." Two walnuts, two figs, and twenty leaves of rue, beaten together and eaten fasting, would preserve against plague or poison for a day. Dogs, we are told, take grass as an emetic; wild goats expel arrows from their flesh by eating dittany; serpents clear their eyes with fennel, and have such a horror of the ash that they will rather go through fire than pass under its shade. Adder's tongue, put in the left ear of a horse, will make him fall down as if dead, but on its removal he will become livelier than ever. Mandrake, "that procureth love in poisonous philtres mixed," bore in those olden times a fearful reputation. It was said to spring under the gibbet from the blood of malefactors; to resemble the human form in shape; and not only to shriek when pulled out of the ground, but to punish any man attempting to remove it with madness or death, so that it was customary to employ dogs for the purpose.

Omens and auguries of the future were also found in the vegetable world. If the elm or peach cast its leaves early, it was thought to prognosticate a murrain among the cattle; the presence of a worm in an oak-apple was ominous of scarcity; a fly, of plenty; a spider, of mortality. A fire-tree struck by lightning prefigured its owner's speedy death.

Of course, love found its tokens in these odd conceits, the common onion furnishing one of them. On St. Agnes' eve a species of divination was practised with the unromantic root, which is thus described by an old versifier:—

"Young merrie girls that meet for marriage be,
Do search to know the names of them that shall
their husbands be;
Four onions, five or eight, they take, and make
in every one
Such names as they do fancy most, and best to
think upon;
Thus near the chimney them they set, and that
same onion then
That first doth sprout doth surely bear the
name of their goodman."

At midsummer eve, equivoque maidens went out into the graveyard at night, commencing as the clock struck twelve, to run round the church, scattering hemp seed, and singing:—

"Hemp seed I sow,
Hemp seed I hoe;
He that is my true love, come after me and
mow."

Having repeated the circuit a dozen times, on looking behind her, the lady would behold her true love carrying a scythe. The rank of a prospective bridegroom was arrived at by plucking the petals of a daisy one by one, while repeating the formula, "Rich man, poor man, farmer, ploughman, thief"—the last petal of the flower of course disclosing the important secret. Doubtful swains carried "bachelors' buttons" in their pockets; if the flowers grew in their strange depository, it was a sign that success would crown their wooing. Such were a few of the influences ascribed to plants and flowers in the olden time; and though these fancies and ideas have changed, their real, ennobling and beautifying powers still remain, and shall abide with us, opening our hearts to Him who gave them to us, enlarging our ideas and beautifying our lives, for as surely as we are God's children, so surely are these lovely flowers that He has given us His smiles upon the earth.

Ottawa.

P. A. S.

TREATMENT OF SICKLY PLANTS.

In the treatment of sick house plants few go to work as though they meant to effect a radical cure. Sometimes plants have been given too much water, or the soil is ill adapted to sustain growth, and, in consequence, they become weak and sickly. The best way is to turn them out of the roots, shake or wash off all the soil from the pots, and, if any are decayed, cut them off; also, prune the stems and branches severely, and pot again in new soil. Set them away in a shady place after giving water sufficient to settle the soil, and then give no more until they become rather

dry, adding a little from time to time as returning health and growth appear. I have some fuchsias and geraniums that, through neglect last summer, became sickly and dropped their leaves; but, by pursuing the above method, they have been entirely restored to health, and are at this date in full bloom.

PLOUGHING MATCHES.

The Provincial Agricultural Association has made arrangements for two grand ploughing matches during the fall, one of which will be held within twenty miles of Beleville, and the other within the same distance of this city. The sum of \$400 will be distributed at each. We are unable to state if other implements will be put in competition. There are several other implements that might be put in operation at such a time, and give farmers an opportunity of judging of their merit. It might be well for manufacturers desirous of showing the working of their implements to enquire of the Secretary at Toronto as to whether opportunities will be afforded for such a purpose.

Ohio Fair.

Mr. S. Thomas, of Oshawa, called at our office on his way from the Ohio Fair, held at Tiffin on the 4th of June. He carried off all the prizes in Devons, amounting to \$180; also the 1st and 2nd prizes in aged rams and yearling ewes, 1st in Berkshire sows, and 1st in Berkshire boars one year old.

He reports dull sales of stock at the Exhibition, but speaks highly of the fat cattle exhibited, one man showing 16 head of cattle, the average weight of which exceeded 2000 lbs., each one weighing over 2,300. They were from three to four years old, and a finer lot Mr. Thomas never saw.

Poultry.

GAPES IN CHICKENS.

W. B. Tegetmeier writes in the *London Field*:—

The fatal disease caused by the presence of the tape worm, appears unusually prevalent. I have had it in my own runs, where it has attacked some Sebright bantams; but I have found no difficulty in curing it by the means of carbolic acid, which I first recommended for this purpose in the *Field* of last year. So potent are the fumes of this powerful remedy, and so destructive are they to parasitic life that their inhalation for even a few moments seems perfectly effectual in destroying the life of the worm.

It is not even necessary to employ any special apparatus; a few drops of carbolic acid may be placed in a spoon and held over the flame of a candle until the vapor is seen to rise, when the head of the young chicken or pheasant (held in the other hand) may be placed in the vapor, which the animal is forced to inhale. Care must be taken not to carry on the process until the fowl as well as the worms are killed. I find after exposure to the fumes for a few seconds the bird may be regarded as cured, and may be seen running about quite well on the following day; if not, the treatment should be repeated. The medical carbolic acid is preferable to the tarry liquid used for disinfecting sewers and drains.

NECESSITY OF GREEN FOOD TO FOWLS.

The last requisite in the shape of diet is a regular supply of green food. Here, again, fowls kept on grass will need no attention; but for the birds penned up the daily provision of it is an absolute necessity, though most beginners are ignorant of it. We well remember in our early experience, how our fowls died, we could not at first tell why; and one fine buff Cochins cock, whose only fault was a strong vulture-hood, was, in particular, greatly regretted.

An experienced friend let us into the secret; and after that we had no difficulty in keeping fowls even where it is often said they cannot be kept in health—viz., in a yard paved with large flag-stones. The best substitute for natural grass is a large fresh turf thrown in daily to each four or five hens; and even in towns it is often possible to procure this, by giving children a few pence every week to keep up a regular supply.

Where turf is not allowed to be taken, grass may be cut or pulled; but in this case it must be cut into green chaff with shears or a chaff machine. The latter plan is how we actually managed for years, in a yard only 67 by 35 feet divided into six pens; paying some child a few pence to bring fresh-cut grass daily, cutting it up and mixing it with their soft meat.—*Wright's new Work on Poultry*.

Agriculture.

A meeting of the Agricultural Society of the county of York, was held yesterday afternoon at the Agricultural Hall, White, in the city.

THE AG.

Mr. Murton, "That the Provincial Agricultural Association, be invited to confer with the county as to the successful carrying out of the arrangements."

Communicated by the Secretary of the Society, with copy of the report for 1899. From Mr. J. send a memorandum of the prizes in the county, Mr. Thompson, Mr. Watson, that the letter for the abolition of the prizes should be sent to the Secretary of the Society, Mr. Watson, he to the difference of the country, whether the prizes were in favor of the smaller or the larger continuing the prizes.

From John that a prize erected on the side of the road, for the purpose of the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the

From the Board Room, suggesting a department presenting the most useful solid prize for the exhibition at the Agricultural Hall, the motion seconded by that the th conveyed to the